

Public Utilities

FORTNIGHTLY

Volume LII No. 9



October 22, 1953

DIVIDEND PAY-OUT—TODAY

By W. F. Stanley

« »

The District Manager—Unsung Hero

By Harold H. Young

« »

Addresses on Public Utility Problems—Public Utility
Law Section—American Bar Association—
Appendix. Part II.

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VOLUME LII

OCTOBER 22, 1953

NUMBER 9



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PUBLIC UTILITIES REPORTS, INC., PUBLISHERS

Publication Office..... **CANDLER BLDG., BALTIMORE 2, MD.**
Executive, Editorial, and Advertising Offices..... **MUNSEY BLDG., WASHINGTON 4, D. C.**

Entered as second-class matter April 29, 1915, under the Act of March
3, 1879, at the Post Office at Baltimore, Md., Dec. 31, 1936. Copy-
righted, 1953, by Public Utilities Reports, Inc. Printed in U. S. A.

*Address all communications concerning the FORTNIGHTLY to the
publishers at Munsey Building, Washington 4, D. C.*

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stands for Federal and state regulation of both privately owned and operated utilities and publicly owned and operated utilities, on a fair and nondiscriminatory basis; for nondiscriminatory administration of laws; for equitable and nondiscriminatory taxation; and, in general—for the perpetuation of the free enterprise system. It is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

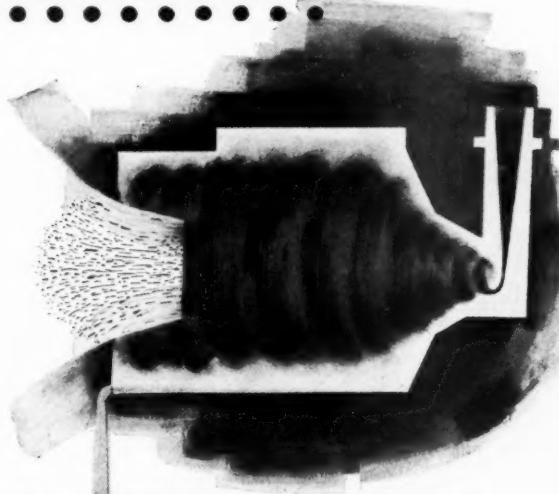
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a complete to the fly-ash problem

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solution



THE CYCLONE FURNACE

Power-plant operators have been plagued for years by the expense and nuisance caused by fly ash and the community relations problems involved in its disposal. They have spent millions to keep fly-ash from reaching the atmosphere and, yearly, spend many additional millions in handling thousands of tons of troublesome, dusty fly-ash and paying for its removal.

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Through this one feature alone—by completely solving the fly ash problem—the Cyclone Furnace greatly improves plant operations. But many other advantages, such as increased availability through elimination of outage-causing equipment, simplified operation through use of crushed coal, reduced cost of upkeep, and higher thermal efficiency, also are obtained with Cyclone Furnaces.

Many B&W Cyclone-Furnace-fired boilers are in operation, in various parts of the country, burning many different kinds of coal. The operating requirements and the design conditions for these boilers include most of the variations that can be expected in utility practice. We will be pleased to discuss with you the many ways in which Cyclone Furnace firing can be of benefit to you.

CYCLONE FURNACE BOILER UNITS IN OPERATION

Owner & Station	Number of Boilers	Kilowatt Rating
COMMONWEALTH EDISON Chicago	1	18,000
Fisk	2	150,000
Ridgeland	4	300,000
PUBLIC SERVICE CO.		
OF NORTHERN ILLINOIS		
Waukegan	1	40,000
Waukegan	1	110,000
Joliet	2	107,000
NORTHERN INDIANA PUBLIC SERVICE CO.		
Michigan City	3	105,000
DOW CHEMICAL CO.		
Wolverine Plant	1	30,000
South Side Plant	2	60,000
WISCONSIN POWER & LIGHT		
Sheboygan	1	60,000
BABCOCK & WILCOX		
Barberton	1	—
JERSEY CENTRAL POWER & LIGHT		
South Amboy	1	62,500
TOTAL UNITS IN OPERATION	20	1,042,500



Pages with the Editors

DIVIDEND pay-out policy, especially in the public utility field, has been undergoing some noteworthy changes in recent years. This has been observed in both financial and regulatory circles. The recent years, of course, have been ones of rapid expansion and construction, to catch up with the phenomenal postwar demand for more service facilities.

IT has been this postwar demand for greater investment which has resulted in some careful thinking about dividend policy. The old orthodox idea was to be conservative about dividend pay-out during periods of expansion when so much money had to be paid out for new construction. Then—so went the old theory—when the plant is built and in service, greater earnings will be produced sufficient to justify a more liberal dividend policy.

THE only trouble with that plausible picture is the investor. It is precisely during the periods of high demand and increased construction that competition for investment funds becomes most acute. The wary investor naturally seeks to take advantage of this "investors' market" by

placing his funds where they will yield the maximum return under conditions of comparable risk. The utilities, therefore, have been under pressure in investment circles to liberalize dividend pay-out as a means of keeping their securities attractive during a period of great money market rivalry.

FORMER chairman of the Securities and Exchange Commission, Donald E. Cook, told the New York Society of Security Analysts in March, 1950, that it was the experience of the SEC that "it is difficult to maintain or attain proper capital ratios in this manner (by a maximum reinvestment of earnings and a minimum of stock financing) because of the large amounts of new capital needed." He pointed to the well-known fact that electric utility common stocks sell more on a yield basis than on an earnings basis, and that the dividend paid rather than earned income has become the most significant price-determining factor.

THE opening article in this issue comes from one of the earliest exponents of a reform, if that is the proper word, in the old idea of conservative dividend policy during periods of necessary expansion. He places his arguments on the basis of industrial security as well as public or consumer interest. A utility management which relies too heavily on retained earnings, according to this view, is cheapening the price of its stock whether it realizes it or not.

THIS writer, W. F. STANLEY, vice president and secretary of the Southwestern Public Service Company, now gives us further demonstration of the all-around benefits to be obtained from an optimum dividend policy. MR. STANLEY has labored for over a quarter of a century on financial corporate accounting and Federal tax and legal matters. During the thirties he was engaged in engineering and managerial work for a private firm, which led him into the service



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of General Public Utilities, Inc., of which he became secretary and treasurer in 1939. This was the predecessor of his present organization. Following merger and integration proceedings, MR. STANLEY became secretary and treasurer of the Southwestern Public Service Company in 1942 and vice president in 1944. He makes his home in Dallas, Texas.

* * * *

ANOTHER well-known figure in utility investment circles who probably needs no introduction to many of our readers is HAROLD H. YOUNG, senior partner of Eastman, Dillon & Co. of New York city. But his article "The District Manager—Unsung Hero," which begins on page 579, is an interesting and readable departure from MR. YOUNG's usual milieu of financial and economic analysis of public utility securities. It is, in fact, a very human interest story. In effect, MR. YOUNG has written an unsolicited testimonial about the district manager of operating utility companies all over the nation. In recent years MR. YOUNG has been taking busman's holidays during his vacations in the form of visits to public utility companies everywhere.

FROM these travels, which carried him to every state in the Union, he concludes that the district manager is the official who can make or break the company at the grass-roots level—the one who really makes the wheels turn at the point of direct contact between the utility and its customers. MR. YOUNG finds that the utility industry is both fortunate and well served in the selection of high-quality, conscientious people holding up their end of the business as district managers.

BORN in Laconia, New Hampshire, MR. YOUNG graduated from Brown University in 1923 and received a postgraduate degree of Master of Business Administration in 1925. He entered the investment business in Providence in that year with Bodell & Co. and remained with that firm until 1943 when he came to New York and shortly thereafter entered the employ of Eastman, Dillon & Co., becoming a partner in 1948. He is charged with the responsibility of public utility security analysis and is well known

OCT. 22, 1953



Greystone Studios

HAROLD H. YOUNG

for his contributions to *Investment Dealers' Digest* and numerous other writings and addresses on that subject in investment and industrial circles.

* * * *

WE conclude in this issue the reprinting of the many fine addresses given before the Section of Public Utility Law of the American Bar Association at its recent annual convention in Boston. The group of papers to be found in this issue in the special Appendix, Part II, beginning on page 605, includes the following speakers: John B. Prizer; Francis X. Welch; Stuart F. Kosters; D. F. Houlihan; and Albert H. Gordon.

* * * *

AMONG the important decisions printed from *Public Utilities Reports* in the back of this number, may be found the following:

THE Tennessee commission, in denying a telephone company's application for authority to increase intrastate rates, rejects the "current cost" value of property as a rate base. (See page 33.)

THE next number of this magazine will be out November 5th.



The Editors

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The Gas Industry Is a United Industry

Frank C. Smith, president of the American Gas Association, as well as president of the Houston Natural Gas Corporation, has given us a clear view of the present status of the gas utility industry as it convenes for its thirty-fifth annual convention at St. Louis, Missouri, October 26th to 29th. Although confronted with some of the most difficult decisions and complicated problems ever to face a major American industry, the gas utilities are going forth with confidence, mainly because, as Mr. Smith emphasizes, they are united in purpose.

The Exploration and Discovery of Natural Gas

The continuity of natural gas service in the future is wholly dependent on exploration and discovery. That is why Paul Kayser, president of the El Paso Natural Gas Company, emphasizes in this article the importance to the consumers of exploration and discovery of natural gas.

A Company Publication Tells the World

It is rather a departure from established practice for a gas pipeline company to publish a magazine for its customers and the public at large. But Northern Natural Gas Company has a good reason for it and William J. Quinlan, publications director, tells us what it is trying to accomplish and how.

Explaining the Rate Case to the Employee

James F. Oates, Jr., chairman of Peoples Gas Light & Coke Company, has been writing a column in the company's publication each month for employees, explaining the importance of the rate case. It has become such a popular feature that other company management people will be interested in this article, which demonstrates how it is done.

Utility Public Relations Comes of Age

Public relations is everybody's job. That means not only everybody within a public utility company's ranks of management and employees. It means the whole field of regulation, including the regulatory commission and its staff. Frank C. Sullivan, San Francisco expert on this subject, gives us a careful analysis of the factors involved and the objectives to be accomplished.

Gas Fights Glamor with Glamor

Twice within its history of more than a century of public service, the gas utilities have been counted out by the pessimists and skeptics. But James H. Collins, Hollywood author of business articles, gives an account of how the gas industry has not only come back but gone forward stronger than ever through intelligent use of promotional techniques.

An Investor's Eye View of Gas Rate Regulation

The one free agent in the whole sphere of regulation is the investor. The utility must serve the customer, who must look to the utility for service. But the investor contributes by choice. Hence the importance stressed in this article by C. A. O'Neil, a partner of the firm of Duff and Phelps, public utility security analysts, Chicago, Illinois, of regulatory thinking which will take into account the importance of appealing to the investor.

The Natural Gas Act Needs Overhauling

If Congress fails or falters in approving presently pending attempts at piecemeal amendments to the Natural Gas Act, what then? Representative John E. Lyle, Jr. (Democrat, Texas), suggests a complete and comprehensive overhaul to clear up the doubt and confusion which plague the FPC, the courts, Congress, the gas industry, and, most of all, the public.



Also . . . Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.



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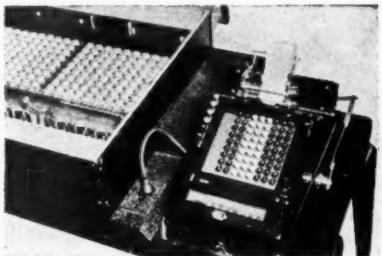
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Remarkable Remarks

"There never was in the world two opinions alike."

—MONTAIGNE

EDITORIAL STATEMENT
The (London) Economist.

"The difference between progress and stagnation does not turn on matters that can be regulated by a planner's decrees; it lies deeper in mass psychology."

MAURINE NEUBERGER
Oregon state representative.

"An illusion exists that politics is a man's job. I can see nothing to convince me that men have done so outstanding a job that they should be permitted to extend and continue this virtual monopoly of all important governmental posts."

CRAWFORD H. GREENEWALT
President, E. I. du Pont de Nemours & Company, Inc.

"This is not to deny that scientific discovery is the raw material of our advance. Yet science alone, invention alone, may be of only academic interest or significance—unless through business development it descends from the clouds to join the service of men."

SINCLAIR WEEKS
Secretary of Commerce.

"If the regulated industries are to render their full service to the nation, it is my judgment that the regulatory bodies must allow earnings adequate to attract and support the equity capital they can use effectively for economies, improvement, and growth."

EUGENE S. LOUGHLIN
Former president, National Association of Railroad and Utilities Commissioners.

"The true protection of our free, private enterprise system in which the public utility industry is basic, is a soundly conceived and independently conducted system of public regulation in the public interest. The alternative in so far as the utility business is concerned is and always will be state ownership and control. It is in this particular respect that those who are regulating and those who are regulated are united in unalterable opposition."

LELAND I. DOAN
President, Dow Chemical Company.

"... I hear too much talk about deflation—about lower prices. I dislike to speak in terms of lower prices. I would rather speak in terms of greater value for the same price. Deflation is, by nature, pessimistic. It breeds hesitancy—a waiting for tomorrow in hope of a better bargain. And that sort of psychology slows the wheels of industry and of progress. Inflation, by contrast, is optimistic, and, over the long pull, symptomatic of progress. Furthermore, it is easier to control inflation than deflation. Trying to stop deflation, as someone put it, is like pushing with a piece of string."

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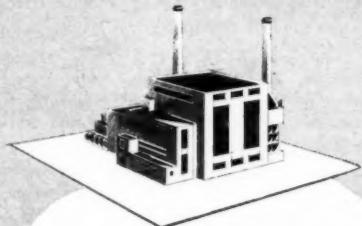
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REMARKABLE REMARKS—(*Continued*)

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Senior vice president, Thomas A. Edison, Inc.

"[Thomas Alva Edison is] a symbol of free enterprise. Unhampered by 'all-wise planners,' of which we have seen too many in recent years, Edison perfected his inventions and put them into production without the approval of government planners. His experiments were carried out in a free economy for the benefit of humanity."

HENRY E. FORD
Director, development department, E. I. du Pont de Nemours & Company, Inc.

"Industrial statesmen must bear in mind the multiple responsibilities of management. It goes without saying that we must operate our businesses so that they will earn a return on capital investment. This is just as essential to the life of business as breathing is essential to human living. If we stop breathing, we die. A business dies when it becomes unprofitable."

LEONARD E. READ
President, The Foundation for Economic Education, Inc.

"Life's problems—obstacles—are not without purpose. They aid the process of self-development, as well as of selection and evolution. They encourage a person to gather new strength and to hurdle the obstacles and to develop his inherent potentialities to their fullest. It isn't an accident that the vast majority of top-ranking Americans, whatever their walk of life, are men whose careers have been associated with hardship and struggle."

HAROLD C. UREY
Atomic scientist.

"I believe that there are certain fields in which it is quite necessary that governments shall take over and carry through certain developments, but I do not believe that a new industry—one where development must be made—is the proper type where this should be done. . . . I believe that returning the atomic energy development to the private enterprise people is, in fact, the most effective way to get this subject developed."

B. L. ENGLAND
President, Atlantic City Electric Company.

"Rate increases obtained during the past few years to offset the rise in the cost of labor and materials were based on the cost of money then prevailing. It becomes critically important that public service commissions give adequate consideration to changes in the cost of money if we are to carry forward successfully the large construction program we are in the midst of. This is not a matter that company management or regulatory commissions can afford to treat lightly."

PRESSLEY H. McCANCE
President, Duquesne Light Company.

"Due to rapid technological advances in the electrical industry, the frequent appearance on the scene of newly discovered or developed applications for the use of electric service, the increasing availability and acceptance of new equipment and appliances for residential, commercial, and industrial use, and the continued relatively low cost of electric service to the ultimate consumer, there is every reason to feel that the rapid rate of growth now being experienced will continue."

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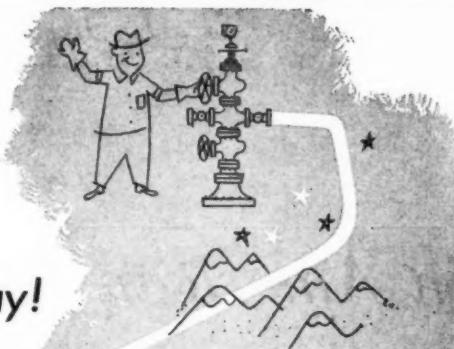
activities, streamlines far-flung operations involving formidable communication problems. Ask for BUSINESS TELEPHONE SYSTEM REPORT NO. 102.

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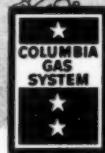
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Where dependability counts, you'll find Dodge!

Public utility trucks must be ready to go . . . night or day, rain or shine, come hail or high water. More and more utilities, like Southern California Edison, are using Dodge "Job-Rated" trucks.

Dependability is a big red **MUST** with Dodge. You'll find it in such features as moistureproof ignition system, high-torque capacity starting motors, positive-pressure lubrication system.

You'll get long life, too, thanks to deep, broad-shouldered frames, shot-peened rear

axle shafts, extra-long alloy steel springs.

What's more, Dodge offers a wide range of engines with 4-ring pistons, chrome-plated top rings, exhaust valve seat inserts . . . ease of handling due to short wheelbase and wide front tread . . . real driver comfort from chair-height seats, greater visibility, big positive brakes.

There's a Dodge "Job-Rated" truck to meet your needs. See your friendly Dodge dealer today.

DODGE "Job-Rated" TRUCKS

The Western Precipitation C M P Unit

*...its advantages to
PUBLIC UTILITIES*

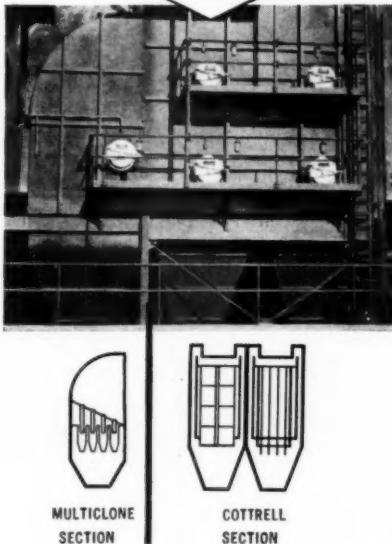
Inasmuch as most public utility power generating plants are located in or adjacent to metropolitan areas, the control and recovery of fly ash from stack gases is a particularly important problem. To assist power plants in solving this problem Western Precipitation pioneered, almost a half century ago, the first commercial application of the now-famous Cottrell Electrical Precipitator—and this type of equipment is still universally recognized as outstanding in its field.

Some years later, Western Precipitation also pioneered the first small tube *mechanical* recovery equipment—the Multiclon Collector—to provide high recovery efficiency at low installation cost.

And as a result of these years of firsthand experience in *both* electrical and mechanical recovery methods, Western Precipitation subsequently introduced the CMP unit—fly ash recovery equipment that combines in *one* integrated unit the advantages of both electrical and mechanical recovery principles.

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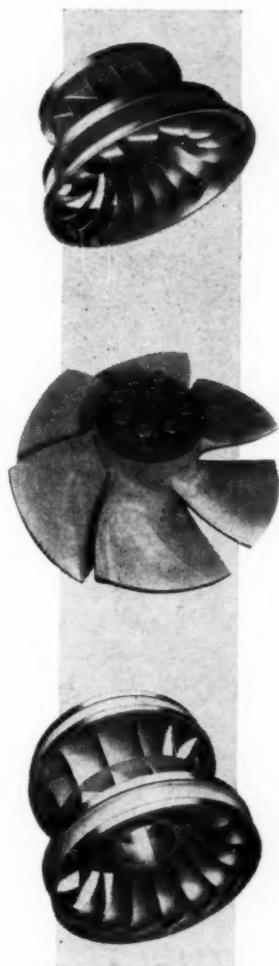
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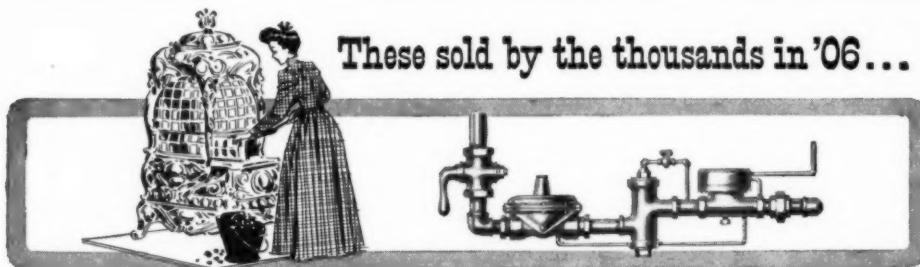
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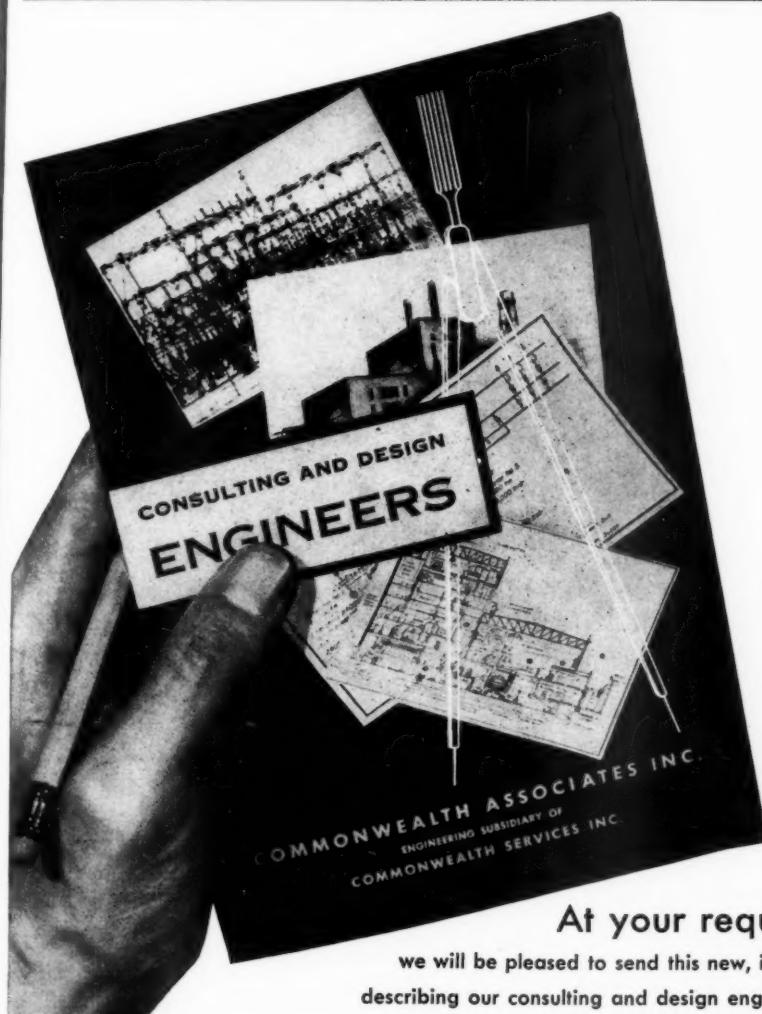
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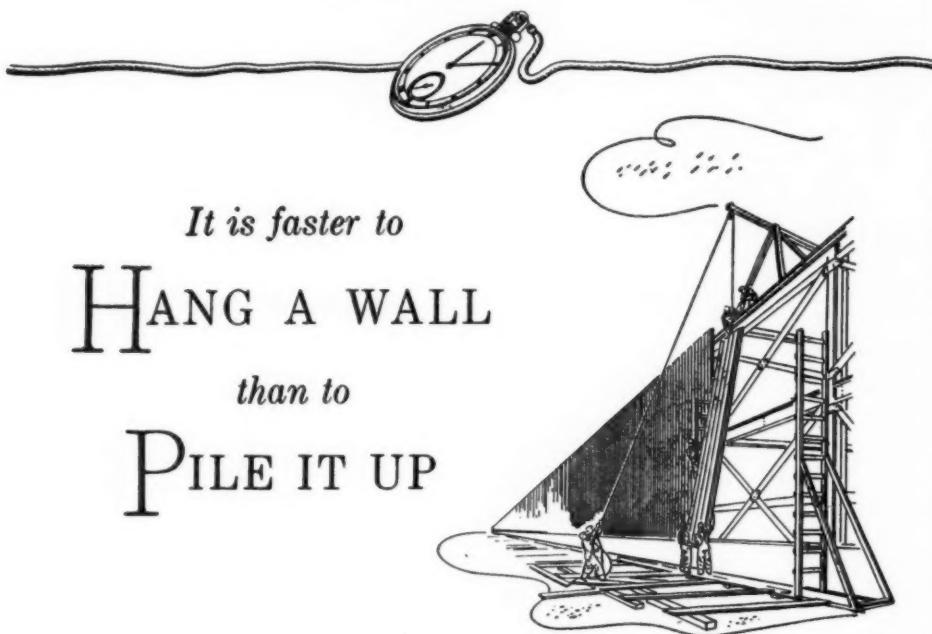
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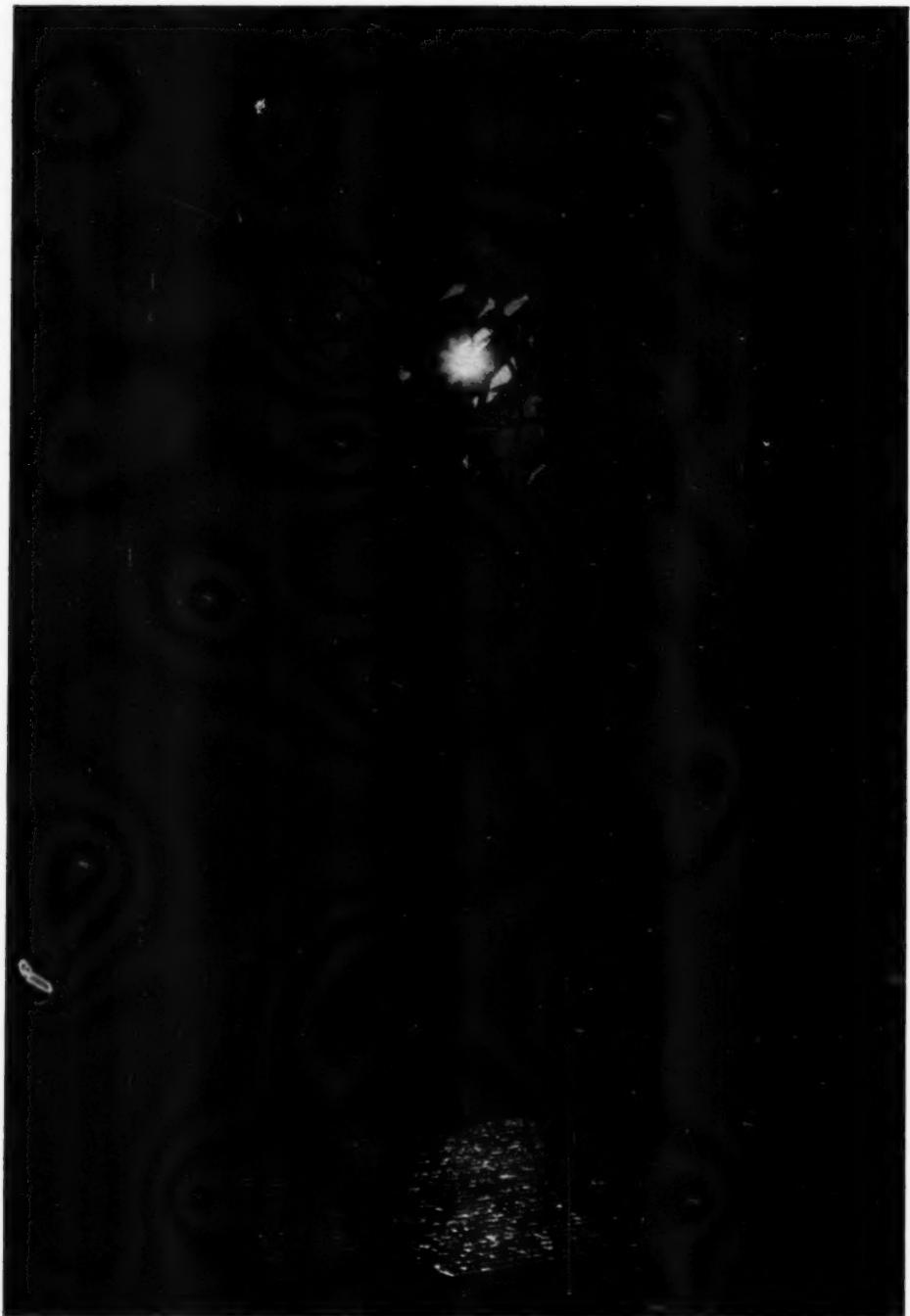
Utilities Almanack

OCTOBER

22	T ^h	¶ Pennsylvania Electric Association, Meter Committee, begins meeting, Lancaster, Pa., 1953. 
23	F	¶ Oklahoma Utilities Association, Accounting Section, begins meeting, Shawnee, Okla., 1953.
24	S ^a	¶ American Water Works Association, New Jersey Section, ends 3-day annual meeting, Atlantic City, N. J., 1953.
25	S	¶ National Association of Electrical Distributors begins meeting of board of governors, Point Clear, Ala., 1953.
26	M	¶ American Gas Association begins annual meeting, St. Louis, Mo., 1953.
27	T ^u	¶ Institute of Gas Technology begins annual meeting, St. Louis, Mo., 1953. ¶ South Carolina Telephone Asso. ends 2-day convention, Clemson, S. C., 1953.
28	W	¶ American Water Works Association, Chesapeake Section, begins annual meeting, Wilmington, Del., 1953.
29	T ^h	¶ Virginia-West Virginia Independent Telephone Associations begin annual convention, Roanoke, Va., 1953. 
30	F	¶ New England Gas Association will hold safety conference, Boston, Mass., Nov. 5, 1953.
31	S ^a	¶ Pennsylvania Electric Association, Systems Operations Committee, will hold meeting, New Castle, Pa., Nov. 5, 6, 1953.

NOVEMBER

1	S	¶ Southern Gas Association begins residential sales conference, Eastern Area, Charlotte, N. C., Nov. 6, 1953.
2	M	¶ American Institute of Electrical Engineers begins fall general meeting, Kansas City, Mo., 1953.
3	T ^u	¶ Edison Electric Institute, Electrical Equipment Committee, ends 2-day meeting, New Orleans, La., 1953.
4	W	¶ Industrial Management Society begins study clinic, Chicago, Ill., 1953. ¶ Southeastern Electric Exchange begins sales meeting, Atlanta, Ga., 1953.



Courtesy, NEGEA News

Moonlight on the Trouble Shooters

An eerie illusion is created by the moon which silhouettes emergency crewmen of the New England Gas & Electric System.

Public Utilities

FORTNIGHTLY

VOL. LII, No. 9



OCTOBER 22, 1953

Dividend Pay-out—Today

This article gives a mathematical demonstration of the benefits from liberal dividend pay-out, not only in terms of financing but also better stockholders relations. It concludes that the dividend pay-out is more important to most stockholders than earnings per share, although anticipation of larger dividends in the future is, of course, a factor in valuing stock.

By W. F. STANLEY*

VICE PRESIDENT AND SECRETARY, SOUTHWESTERN
PUBLIC SERVICE COMPANY

THE time has come, the Walrus said," to talk of that perennially controversial subject—dividend pay-out policy.

The PUBLIC UTILITIES FORTNIGHTLY of October 21, 1948, carried an article by the writer, entitled "Dividends—The Key to Value," wherein the attempt was made to demonstrate that, strange as it seemed, periods of heavy expansion should be accompanied by a liberal, rather than a

niggardly, dividend policy. This principle reversed the superficial, but plausible sounding, concept that with so much money going out for construction expenditures, a company should hold dividend payments to a relatively low level. Since then there has gradually arisen a wide and increasing recognition of the value and advantages of liberal dividend policy, particularly in the case of companies with rapid and continuous expansion.

A poll of utility analysts made a few years back by General Public Utilities Company brought the re-

* For additional personal note, see "Pages with the Editors."

PUBLIC UTILITIES FORTNIGHTLY

sponse from the majority of those approached that dividend yield (and therefore dividend pay-out) was the most important single factor affecting the market value of utility common stocks.

ONE of the strongest and clearest statements favorable to liberal dividend policy was that of the Honorable Donald Cook, then vice chairman of the Securities and Exchange Commission, in an address to the New York Society of Security Analysts on March 29, 1950, in the course of which he said:

One of the most important attributes of a utility company to investors is its dividend policy. In the growing utility industry, many companies find that they must utilize retained earnings to assist in financing construction. Some utility companies, however, have attempted to finance their construction programs through a maximum of retained earnings and a minimum of new common stock financing. Our experience has been that it is difficult to maintain or attain proper capital ratios in this manner because of the large amounts of new capital needed. It is well known that electric utility common stocks sell more on a yield basis than on an earnings basis. All other elements being equal, dividends paid, rather than income earned, is the most significant price-determining factor.

A utility management which relies too heavily on retained earnings is, therefore, consciously or unconsciously, cheapening the price of its stock. If it errs too much in this respect it is unfair to the utility investor interested primarily in income rather than in capital gains, and it is to the investor for income to whom it must look for new capital. If its price-earnings ratios are too low, it exposes itself to relatively severe dilution of earnings when it goes to sell common

stock, and this, in turn, intensifies its reluctance for common stock equity financing....

I do not want to be understood by what I have said as urging general dividend increases. But there is an optimum dividend policy for each company, and I am expressing doubt that all companies have given full weight to all the factors involved. One may err, of course, on the high side as well as on the low side, considering the necessity of having balanced ratios and financing construction needs.

BUT despite this wide recognition of the benefits of liberal dividends, two somewhat persistent fallacies seem still to obscure this question. First, there is a school of thought which contends that higher market values are obtainable if a larger proportion of earnings is retained, thus increasing net income and, accordingly, per share earnings, which, in turn, tend to increase the market price. It is an obvious truism that retained earnings invested in additional facilities and yielding the customary rate of return will increase net income, per share earnings and, therefore, should tend to increase market value. The fallacy here lies in the implied assumption that the new facilities from which this income is to be derived will not be constructed (and therefore no net income will be forthcoming) unless earnings are retained and applied to the construction of the facilities. How such a concept can be maintained in the light of current experience is difficult to understand, for it is well known that in this day and age the amount which an electric utility spends for constructing new facilities is in no way dependent upon or related to the amount of earnings retained in the

DIVIDEND PAY-OUT—TODAY

business, construction expenditures being uniformly determined solely on the basis of what facilities the management believes will be needed to meet increased demands and provide adequate and reliable electric service. If money for this construction does not come from retained earnings, then it will be provided by financing. So, in any case, regardless of dividend payout, the new properties will be added and income obtained thereon.

This fallacious concept, which implies that only through retaining earnings can this additional income be obtained from new facilities, would be tenable only in cases where it was not feasible to finance. Fortunately for the electric utility industry such a situation has not yet been encountered and there seems every reason to believe that the utility industry can continue to raise equity funds as needed.

THE second persistent fallacy lies in the assumption that dividend pay-out necessarily affects the common stock ratio. Actually, common stock equity ratio can be and is customarily determined as a separate and distinct policy entirely apart from dividend pay-out.

In financing its new construction, the management of the utility cus-

tomarily will first determine what common stock equity ratio it desires to have when the financing has been completed. Whether the financing will increase or reduce the ratio formerly existing, the desired ratio can be arrived at as a separate determination entirely apart from dividend pay-out policy. The decision as to equity ratio will necessarily form a part of the determination as to the proportion of the new capitalization which will consist of bonds, of preferred stock, and of common stock equity, respectively. This decision, too, can be made and adhered to regardless of dividend payout policy, assuming that all these types of securities are then salable in the market.

HAVING decided the common stock equity ratio and accordingly the apportionment of new capitalization between bonds, preferred and common stock equity, we come next to the area where dividend pay-out will have a bearing on the situation. For the amount which the company desires to add to its common stock equity, in order to arrive at the common stock equity ratio desired, must consist either of retained earnings or of additional common stock capital derived from the sale of additional shares.



Q“The increasing importance of institutional and trust investments in utility common stocks makes the continuity of dividends more important than ever before, and for this reason dividend increases should obviously be made only when there is a reasonable prospect during at least the near-by foreseeable future that the higher rate can be maintained, after reflecting the additional shares which will have to be issued to finance construction and all other foreseeable factors.”

PUBLIC UTILITIES FORTNIGHTLY

Here it is obvious that the larger the amount of retained earnings the smaller need be the amount to be raised by the sale of additional stock, and vice versa.

So we find that dividend pay-out policy does not affect the amount of new facilities to be constructed, nor the common stock equity ratio desired to be attained, but affects only the means by which the additional common stock equity is to be raised. It is true that retaining of earnings and their employment in construction, as against raising the same amount in additional common stock capital, would increase per share earnings on the common stock if, by reason of the higher dividend pay-out the number of additional shares to be sold was greater than if the dividend had been smaller, for in that event per share earnings would suffer greater dilution than if a smaller dividend had been paid.

IN the writer's article of October 21, 1948, on this subject it was pointed out that if the expansion of a utility was at a rate which would require it, in order to maintain the desired common stock equity ratio, to increase its outstanding shares in the neighborhood of 10 per cent per annum, then the additional market value created by the higher dividends, when applied to the additional shares to be sold, would offset the cash required for the additional dividend paid in that year on all outstanding stock; so that the number of shares to be sold would be no greater by reason of the higher dividend and there would be no additional dilution of per share earnings on that account.

Since that time the improvement in the market for utility securities has increased the market value of a dollar of dividends paid so that at about today's level it would only be necessary for corporations to increase their outstanding shares at the rate of only about 6 per cent per annum in order to increase the per share market value sufficiently to provide the cash required to pay the larger amount of annual dividend.

How this works is demonstrated in the table on page 575. This takes the figure of construction expenditures for the electric industry of \$2.6 billion in 1952 and assumes a similar expenditure in each of the years 1953 and 1954. Column A shows the actual financing of the electric industry in 1952 and assumes the same total new capitalization and the same proportions of securities in the two subsequent years. Nineteen hundred and fifty-two equity financing is related to actual dividend pay-out of the industry for that year of about 73 per cent, and column A assumes the same percentage pay-out in 1953 and 1954. Column B is in all respects similar to column A, except that it assumes an increase in dividend pay-out from 73 per cent of earnings in each of the three years to 80 per cent of such annual earnings. It will be observed that construction expenditures and the total amount of additional common stock capitalization (and, consequently, the common stock equity ratio) are the same for both columns A and B in each year, but the amount of retained earnings and the amount of common stock equity to be raised by financing differ as between the two columns in

DIVIDEND PAY-OUT—TODAY

	1952	1953	1954
	<i>A</i>	<i>B</i>	<i>A</i>
	\$2,600	\$2,600	\$2,600
Construction*	.....	.....	.....
Financing	.....	.....	.....
Long-term Debt*	1,135	1,135	1,135
Preferred Stock*	201	201	201
Common Stock Equity	.....	.....	.....
Additional Common Stock Sold*	408	464	448
Retained Earnings*	216	160	176
Total*	624	624	624
Total Increase in Capitalization*	\$1,960	\$1,960	\$1,960
Depreciation Cash*	510	510	510
**Other Internal Cash*	130	130	130
Total*	640	640	640
Total Cash*	\$2,600	\$2,600	\$2,600
Net Increase in Plant*	2,150	2,150	2,150
Earnings for Common Stock* (1952)	.....	.....	.....
Additional Common Stock Earnings*	.....	.....	.....
1953†	—	—	—
1954‡	—	—	—
Earnings for Current Year*	.....	.....	.....
Shares Outstanding	800	800	800
Per Share Earnings (Approx.)	\$1.00	\$1.00	\$1.06
Dividends Per Share	(73%) 73	(80%) 80	(73%) 74
Market Price	\$13.13	\$14.40	\$13.93
Additional Dividend Per Share (B over A Cumulative)	.....	.....	.....
Less Tax at Average Assumed Rate of 45% (Cumulative)	.03	.07	.07
Net Increase in Per Share Dividend (Cumulative)	.04	.08	.08
Increase in Market Value Per Share (B over A—Cumulative)	\$1.27	\$1.33	\$1.27
Additional Investment Per Share—i.e., Income Tax on Additional Dividends—Cumulative	.03	.07	.10
Total Net Increase in Value Per Share (Cumulative)	\$1.288	\$1.348	\$1.298

1953 and 1954 has not been adjusted to reflect larger amounts of plant in those years. *This figure is not given in the Edison Electric Institute release as to 1952 and, accordingly, has been added solely to balance the cash intake with the outgo. †Assumes additional income for common stock equal to 6 per cent of net increase in plant (\$2,150 per year), less 3 1/2 per cent interest on increase in long-term debt and 4.7 per cent dividends on preferred stock. ‡Assumes about 10 per cent of original market value in 1952.

PUBLIC UTILITIES FORTNIGHTLY

each year, reflecting the difference in the percentage of earnings paid in dividends. Column B also reflects the increase in market value due to the higher dividends. Dividends have been capitalized in both columns at 18 times, or the equivalent of a yield basis of 5.55 per cent. The 1952 figures are as shown by the Edison Electric Institute release except that the number of shares used is an arbitrary assumption—800,000 shares for 1952 to result in per share earnings of \$1 per share for that year. Financing is assumed to occur at the end of each year with the increased earnings applying to the following year.

THE foregoing table assumes that, in order to raise the funds necessary for construction and maintain the common stock equity ratio, all stockholders will invest, in purchasing additional common stock, an amount equal to the additional dividends they receive. It also assumes that the income tax to the stockholders on these additional dividends will average 45 per cent thereof, so that the stockholder would be called upon to make an additional investment equal to this tax.

After giving effect to all these factors, the table indicates that an increase in dividend pay-out from 73 per cent to 80 per cent would create a total gain to the stockholders of about 10 per cent of the assumed market value of the stock at the start of the 3-year period. This gain would consist principally of capital gain appreciation with only a small portion representing additional dividends.

Thus increase in pay-out percentage from 73 per cent to 80 per cent ap-

plied to the figures for the industry would enhance the value of the stockholder's holdings by about 10 per cent over the 3-year period, while enabling the company to make the same construction expenditures and maintain the same common equity ratio.

In using the figures for the electric industry as a basis for the foregoing computations, the annual outstanding increase in shares of common stock (necessary to finance the new construction and maintain the equity ratio) is indicated in the neighborhood of only 4 per cent. This is somewhat less than the approximately 6 per cent annual rate of increase which appears necessary to avoid additional dilution on account of the higher dividend pay-out. As a result, the foregoing table shows a small additional dilution from this source. However, it is reasonable to believe the majority of the electric utility companies are today expanding at a rate which would require them to issue additional common stock at an annual rate of 6 per cent or more. Southwestern Public Service Company, for example, has now for seven consecutive years annually increased its outstanding shares at the rate of at least 8 per cent, and in one year this increase was as high as $12\frac{1}{2}$ per cent. So to the expanding company it seems reasonable to assume the higher dividend will not result in any greater dilution in per share earnings, in fact there should be less dilution in many cases.

EVEN in the case of stockholders whose income taxes fall in the high brackets, the over-all enhancement in value of their holdings due to the increase in dividend pay-out

DIVIDEND PAY-OUT—TODAY

would be almost as much as indicated above. With an 80 per cent top bracket, for example, they might be required to reinvest nearly six cents per share per annum instead of the three cents per share per annum shown above. However, it will be observed that the market enhancement of about \$1.27 per share resulting from the higher dividend is equal to over 20 times an additional investment of six cents a year for a high tax bracket stockholder. Thus the increased dividend, although in itself of little value to high bracket stockholders, brings about the capital appreciation which is the very thing that stockholders of that class desire.

THREE is a tendency for the market prices of electric utility equities to reflect a higher dividend yield where the dividend pay-out percentage is higher. This usually takes the form of a relatively low yield where pay-out is low (60 per cent, for example) in expectation of a dividend increase. In the case of an increase from 73 per cent to 80 per cent in dividend pay-out, it seems unlikely the yield basis would change more than a small fraction. For example, the 5.55 per cent yield basis assumed in both A and B columns of the above table might increase to 5.65 per cent with an 80 per cent pay-out (17.7 times). Even on this basis the markets would increase to \$14.16, \$15.01, and \$15.72, so that the increase in market value due to the higher dividend would still be at least \$1 a share in each case, even after this adjustment.

In reflecting an increase in the industry average dividend pay-out of 73 per cent for 1952 to 80 per cent

the writer does not intend to indicate that 80 per cent (or any other particular figure) is the proper pay-out percentage for electric utilities generally. The correct percentage must vary in the case of each company.

THE increasing importance of institutional and trust investments in utility common stocks makes the continuity of dividends more important than ever before, and for this reason dividend increases should obviously be made only when there is a reasonable prospect during at least the near-by foreseeable future that the higher rate can be maintained, after reflecting the additional shares which will have to be issued to finance construction and all other foreseeable factors.

The question of just how far management should go in seeking to reflect and consider all possible unfavorable eventualities is a difficult one. Indicated future adverse factors affecting a particular company could well warrant a cautious approach to an increase in dividend pay-out by that company.

The purpose of this article is not to attempt to define the proper proportion of dividend pay-out, nor even the range within which these percentages might vary, but rather to again emphasize, as a word spoken perhaps in season, that an increase in dividends, if reasonably warranted, should, under present market conditions, result to the over-all benefit both of the company and its common stockholders because of the paramount importance of dividends in determining the market value of electric utility equities.

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The stockholders get the benefit of the additional dividends for their use or investment and also, and much more important dollarwise and tax-wise, they obtain the benefit of a legitimate and permanent increase in the market value of their stock. The benefit from increased dividends varies in degree according to how much the stockholder can keep after taxes, but because of the maximum capital gain rate stockholders are permitted to retain the greater part of the enhancement in market value. The word "permanent" is used advisedly, for, so long as electric utility stocks continue to sell primarily on a yield basis, higher dividends will result in higher market values regardless of changes in general market levels. For example, in the table above the 1952 market value is shown as \$13.13 with a 73 per cent dividend pay-out and \$14.40 with 80 per cent pay-out, a difference of \$1.20 per share. That reflects a 5.55 per cent yield basis. Suppose the yield increased to 6 per cent, then with a 73 per cent pay-out the market price would drop to \$12.17 and to \$13.33 with an 80 per cent pay-out. The difference here would be \$1.16. If the yield fell to 5 per cent, then the market prices would be \$14.60 and \$16, respectively, with a \$1.40 per share difference. So a substantial market benefit would remain, regardless of a rise or fall in market level. Meanwhile, it is again repeated that all this is accomplished with no difference in construction of new facilities or in common stock equity ratio because of the higher dividend pay-out.

There will, of course, be particular cases where special reasons make an otherwise warranted dividend increase inadvisable, but these are the exceptions that prove the rule. And the rule still seems to be, at least for the expanding electric utilities, that a liberal dividend policy will create the maximum legitimate over-all value for all classes of stockholders, large, small, and medium, while maintaining the same capital structure and equity ratio. Furthermore, if the rate of expansion is sufficiently rapid, the degree of dilution in per share earnings because of the new equity financing can even be somewhat reduced as a result of higher dividends and in this case stockholders would obtain an additional benefit in the form of slightly higher per share earnings.

Quite apart from the mathematically demonstrable benefits from liberal dividend policy, there is also an intangible benefit from this policy in the form of better stockholder relations. For, rightly or not, the majority of stockholders seem to hold to the tenet that the earnings of a corporation belong to them and where dividends are withheld many of them tend to feel, subconsciously at least, that their property (the earnings) are being unjustifiably withheld from them. The more liberal the dividend policy may be, the less likelihood there is that stockholders will develop a critical attitude on this account, and contrariwise, the greater probability of a larger number of satisfied stockholders—stockholders who, after all, are the real owners of the enterprise.



The District Manager— Unsung Hero

From recent travels, which carried him to every state in the Union, the author concludes that the district manager is the official who can make or break the company at the grass-roots level—the one who really makes the wheels turn at the point of direct contact between the utility and its customers. This article shows that the utility industry is both fortunate and well served in the selection of high-quality, conscientious people holding up their end of the business as district managers.

By HAROLD H. YOUNG*

I WOULD start this article by making plain that it is an unsolicited testimonial. I am an investment banker and am not connected with the public utility industry. Accordingly, I dip my pen with neither an ax to grind nor an apple to polish.

Since I am not a part of the public utility industry, someone may challenge my qualifications for writing on a topic tied in with utility company operations. Accordingly, before I warm up to the presentation of my subject I will present my credentials.

My work in investment banking, going back over twenty-eight years, has been tied in largely with public utility securities. In the last ten years

my efforts have been entirely directed to the public utility field. I have felt that I could be better informed about the merchandise which I recommend and that I could speak with more authority and assurance if I were as familiar as possible with individual utility companies. I have sought to become acquainted with their operations, territory, and management.

Accordingly, I have made a point of visiting as many companies as possible and have even given over some of my vacations to a "busman's holiday." In carrying out this program I have visited at least one utility company in each of the forty-eight states and the District of Columbia, with Mexico thrown in for good measure. I would not attempt to specify the number of utility companies on whose

*Senior partner, Eastman, Dillon & Co. New York, New York. For additional personal note, see "Pages with the Editors."

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doors I have knocked but I could name well over 100 without even stopping for breath. Some of these visits have been made in connection with organized groups but much more often I have made an appearance under my own auspices and have been able to get correspondingly better acquainted.

SOMETIMES my calls have been made just at the home office, but a great many have included trips through important parts of the territory. On such trips I have really been able to find out what makes a utility company tick. I have met a great many utility company officials and employees on their native heath and have had the pleasure of crossing the paths of many of them at industry conventions and other gatherings. The reader might conclude that what I have observed on my travels has contributed to my confidence in public utility securities, else I would not continue to be an avowed "missionary" for public utility stocks after all these years. His conclusion would be correct.

Of course, the very characteristics of public utility operations help to make the securities fine investments. These companies provide services which are necessary and their business is ever-growing; they offer a degree of protection in periods of general recession because a considerable segment of their revenues are depression-resistant. However, even a superior type of business cannot run itself. There must be men in the picture; the human equation cannot be overlooked. My confidence has been inspired by the high type of management carrying on the public utility business today. The era of the "utility barons" defi-

nitely ended years ago. Management today is sensitive to its responsibility to three groups: the customers, the employees, and the stockholders. Furthermore, utility management today is able and aggressive.

Some people in the financial community are prone to form judgments on the utility industry and on individual companies solely from printed facts and figures. Published statistics do not tell the whole story by any means. That is why it has been helpful to meet the men running different companies.

OBVIOUSLY, the personnel of a utility company includes key executives at the top and employees at the other end performing routine tasks. In between are men with varying degrees of authority and policy-making responsibility. All groups make a contribution and none can be singled out as being especially indispensable.

However, for purposes of this article I do want to single out and pay tribute to a group of men who have impressed me greatly in my travels and about whom, in my humble opinion, not enough has been said or written. I speak of the district managers. Because so much of their work has been carried on with self-effacing efficiency, I characterize them in the title of my article as "unsung heroes." Let me hasten to say that I am using the term "district manager" in a very broad sense. Nomenclature is different in different companies. The man I am writing about may be known varyingly as a division manager, a district manager, a group manager, or by some other title. I do not want to

THE DISTRICT MANAGER—UNSUNG HERO

quarrel about words and I would feel bad if some man felt left out of this discussion because I had not hit on his exact title. The man I have in mind when I say "district manager" has responsibility for the over-all conduct of a company's affairs in a specified portion of the service area. I shall speak of him as "district manager" to make things easy, even if that term is not universally applied.

The top men of the utility companies establish the broad policies. The district manager, however, is the man who must make the wheels go round where the company and the customers actually come together. A district manager can "make or break" a company at the grass-roots level. Very fortunately, the type of man who usually fits into this slot "makes" the company rather than "breaks" it. This man has to see that service is adequate and that, so far as is humanly possible, it is continuous. If continuity fails at any time it is up to him to see that restoration is as speedy as possible, that there is a minimum of inconvenience due to the interruption, and that proper publicity is given to the occasion for the service break.

THE district manager, so far as most of the customers are con-

cerned, is the man out front. If something goes wrong the average customer does not think of the president, the general manager, or any other of the "big brass." He thinks of the district manager and makes a beeline for his office or gets him quickly on the telephone. Hence, the man who sits behind the district manager's desk must have patience, tact, and a superabundance of ability to get along with people. He must be prepared always to present and defend the case of the company and still send a customer away with ruffled feathers smoothed.

However, it would be unfair to paint a picture of a district manager as a glorified fireman who goes into action only when something is wrong. The situation is quite the contrary and because a good district manager is always on the job, the task of hearing and settling complaints is often pretty well minimized. One of the big success secrets is that the district manager, if he is worth his salt, is an integral part of the area for which he is responsible. His position in the community or communities he serves is usually an outstanding one. It is rare to find a district manager who is not only a good citizen but also a reasonably prominent one. The time given to civic undertakings by these men is unbelievable. In this connection I might



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add that if district managers are, as I insist, "unsung heroes" then their wives are "unsung heroines" for the time these men have available for their homes and families is often pitifully small.

If you go into a community, especially one of modest size, you will almost invariably find the utility district manager in one or more key spots in organizations advancing the welfare of the community. Not only is he busy, himself, but he recruits his subordinates to fill various jobs which have to be done. Accordingly, the public utility men and the district manager conspicuous among them are more often than not in posts of responsibility in the chamber of commerce, the various services clubs (Rotary, Kiwanis, Lions et al.), the Community Chest and other drives, Boy Scouts, and 101 other worthwhile undertakings. Of course, one underlying theory is that what is good for a community is good for the utility company which serves it. It is also true that what is good for a community is good for the butcher, baker, and candlestick maker in it but for some reason it seems to be universally recognized that the public utility people are the first to whom to turn when there is a job to be done. On the other hand, discretion is necessary to fore-stall any charges that a utility company is seeking political power or that it is trying to "run the community."

The district manager makes a conscious effort to sell himself to the community and if he does more often than not he has also sold his company to the community. In fact, the community often thinks of a utility com-

pany in terms of its district manager.

One of the outstanding examples of this came to my attention in the course of a visit to a middle western utility where I found at one spot a district manager who struck me as being below par as to ability and aggressiveness. Later, I commented on this fact to one of the top officials who received my observation with a chuckle. He said that I was dead right but that the company could not afford to even think of having any other man in that spot because this man had so ingrained himself in the community with the people that they thought of the company as "his" company. Any local moves were always weighed in the light of the question whether they might do anything to hurt "him." The official went on to say that any shortcomings the man had could be quickly and easily made up through assistance from other members of the organization but he was irreplaceable as far as what he did for the company in maintaining the good will of the community.

WHERE a district manager is well regarded, a company is much more likely to get the consideration it deserves. A while ago I was visiting a company and the vice president who was accompanying me on the trip spoke of the district manager in a town we were to strike and asked me to note him especially. His observation was that "every man, woman, child, and dog" in the town knew him. When we arrived in the community I could see that for myself.

A humorous story went along with the discussion. This manager had the assignment of seeking higher rates

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The District Manager's Job Is Never Done

“. . . it would be unfair to paint a picture of a district manager as a glorified fireman who goes into action only when something is wrong. The situation is quite the contrary and because a good district manager is always on the job, the task of hearing and settling complaints is often pretty well minimized. One of the big success secrets is that the district manager, if he is worth his salt, is an integral part of the area for which he is responsible.”

from his local city council. (This was in a state without commission jurisdiction over this particular type of utility.)

The head office had a distress call from the manager who said he had been warned that his presentation in behalf of higher rates was going to meet with concerted opposition. This did not make sense to the home office but a key executive went down to see what was wrong. He had not been in town long before he discovered that this was only a big hoax framed up to give discomfort to the local manager who really was held in the very highest regard around town. When the night of the council meeting came the manager presented his story and the council asked if that was all he wanted. He replied in the affirmative and they assured him there was no problem involved and asked what he was worked up about! The point is

that a man of this kind is a very valuable asset to any company.

It is an interesting experience to walk down a main street or step into a local restaurant with a district manager. His broad acquaintance and the esteem in which he is held is obvious. This broad acquaintance helps protect a company against agitation for municipal ownership, pressure for unwarranted rate reductions, or other frontal attacks. It is easy to start agitation detrimental to a company when relations are on a strictly impersonal basis. It is equally hard to inaugurate such a campaign when the key man is somebody whose path is crossed frequently by the citizens of the community at civic gatherings, at church, in local business establishments, or anywhere around town.

However, the broad acquaintance

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of a district manager is not valuable only for "fence-mending" purposes. It is also the keystone of promotional and business-building programs. The district manager knows what factories in his area should be making installation of labor-saving machinery which would add to their consumption of electricity or gas. He knows what stores or restaurants are candidates for air conditioning or modernized lighting. He knows the homes and business establishments which are prospects for gas-heating installations, and so on. Maybe specialists from the home office come in and help develop this new business but it is the district manager who knows where the work will pay off and takes the initiative. He also heads up promotional work of a more general nature, such as cooking classes, appliance demonstrations, showings of motion pictures before service clubs, projects in schools, and so on.

THE district manager is very often in the forefront of moves to get in new industry. This helps the company and helps the community. This is a very important matter at the present time when a great deal of decentralization of industry is going on and new locations are being established. There is very keen competition to get new industries and utility men put in a great many hours building a case as to why their community should receive favorable consideration.

Occasionally, public utility companies get something extra for their money in that they have men occupying posts as managers who would be well fitted to step into top executive positions. However, these men prefer

to remain in the community where their roots are deep. They take pleasure in their life in the community and are disinclined to move away. One public utility president pointed out a division manager to me and said, "He should have had my job." The manager was senior in age and experience to the president and might have filled the president's post with distinction but he preferred to stay in the spot where he was.

The other side of the story is that I am afraid occasionally a company may take advantage of a situation by leaving a district manager in a spot where he has made himself valuable and passing him over when there is a vacancy up the line into which he might have been promoted. The motive may be to avoid the trouble of bringing along a junior man to take the post which has been so very satisfactorily filled.

Some companies dignify their managers in key spots with the status of vice presidency. Such a plan has something to commend it, although the practice could not be followed generally.

THE district manager is a "Jack-of-all-trades" since he must be able to direct and counsel all of the employees who report to him. More often than not the manager has come into his spot only after well-rounded experience so he is fully able to map a campaign and cope with an exigency in any part of the business. I would not attempt to enumerate all the different phases of the business with which the district manager must be familiar. I would be sure to leave out a lot of items. I can assure you, how-

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ever, that the list would be very long.

At the present time we find in the financial community a noticeable concern about the possibility of a business recession and investors in public utility stocks wonder how they would be affected. Some observers go so far as to assume a certain percentage drop in business and then calculate the effects it would have on the bottom line earnings. Certain of these people give credit only for obvious savings like decreased fuel consumption and decreased Federal taxes. I cannot go along with this approach because I cannot understand where these critics think the management of companies would be while the business recession is going on. When you know the individual men who have the destinies of these companies in their hands you cannot help having a feeling of confidence that initiative and resourcefulness would come into play to effect economies in many directions. I would look for many of these savings to be effected at the local level with the district manager the man who could and would spot many of the potential savings.

I AM firmly convinced that if investors generally had the benefit of the personal contacts which I have had in the public utility industry they would

feel that there is an extra measure of protection for their investment which they had not fully appreciated or evaluated. This is something that annual reports and statistical services do not show. Even the people in financial centers do not get the full picture if they depend on contacts with visiting representatives of management because these are most often top executives. Back of these top executives are men on the firing-line who seldom come to financial centers except on personal missions and not as company emissaries. I feel the contribution of these firing-line men is not to be overlooked.

I HOPE some of my district manager friends throughout the country who have bundled me into the front seat of their automobile and have driven me around their territory or who have patiently told me their story when I have visited their office will see and read this article. I would like them to know that with at least one person their efforts and achievements have not gone unnoticed. On the other hand, I hope I may help increase the confidence of investors in public utility securities by emphasizing the important contribution made by men and management — folks like the district manager, for example.

“THIS is an electric and an electronic and an atomic age. It is a push-button age. Things inconceivable or thought to be impossible a few years ago are in the accepted category today. New discoveries, inventions, or methods that involve a further use of electric service are being announced or made known to us with increasing frequency. They are so frequent as to be commonplace unless of major significance. Huge industries have been created in a few years by a single discovery or development, as, for instance, television.”

—PRESSLY H. McCANCE,
President, Duquesne Light Company.



Financial News and Comment

By OWEN ELY

The Cost of Common Stock Money

JOHN F. CHILDS, vice president of the Irving Trust Company, New York, presented some interesting testimony before the Illinois Commerce Commission on September 9, 1953, in connection with the rate case of Commonwealth Edison Company, on the "Measurement of Underpricing for Purposes of Determining the Cost of Obtaining Common Equity Money." Since about two-thirds of electric utility common stock funds raised in the market during the period January 1, 1949-July 31, 1953, was obtained through subscription offerings, his study was based on this method of financing. There are six items in the cost of raising equity funds, four relating to "underpricing," and two to routine financing procedure:

1. *Preoffering Pressure*—The decline in the market price when formal announcement of the rights offering is made (actually there may be some preliminary pressure due to advance knowledge of the offering). This can be measured by studying the decline in the price of a utility stock from two days prior to the formal announcement of financing to the day the subscription price is set. It is necessary to eliminate movements of the stock market as a whole by means of an index of prices (the Dow-Jones utility index).

2. *Rights Pressure*—The decline in market price after the subscription price

has been set and during the period the rights remain effective. Pressure on the market is due to the added supply of the stock, and the immediate diluting effect on share earnings per share. (Mr. Childs did not point out that many companies now try to minimize the latter effect by stating share earnings on the basis of "average shares outstanding.") The pressure on the market during the last five days of the subscription period is especially important, and was the basis of the study. It is then that most of the warrants are exercised and it is during that period that the success of the offering will be determined. In measuring this decline it was again necessary to adjust for movements of the general market.

3. *Market Break*—Thus far we have assumed a normal, stable general market. However, utility management must make allowance for the possibility of a market break. This can be studied by

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the law of probabilities, as applied to the past history of market prices (see below).

4. *Rights Value*—Some further underpricing, to insure a residual value for rights under adverse conditions, should also be made. If rights are worth only a negligible amount, as when quoted in 1/64s or 1/128s, stockholders may become annoyed and ill will is created.

5. *Underwriters Fees*—In most cases of rights offerings, the company prefers to pass some of the market risks, particularly that of "market break," on to underwriters who are better qualified to analyze this factor. There are a considerable variety of methods of compensating the underwriters. Sometimes, in lieu of underwriting, dealers are paid to solicit subscriptions and a "manager" is appointed to head up this group.

6. *Corporate Expenses* in connection with the financing, such as preparation and printing of the prospectus, legal fees, etc.

Mr. CHILDS presents some interesting statistics based on detailed studies of a number of common stock subscription offerings in the past three years, made by the public utility department of the Irving Trust Company. The average results for 16 issues which were underwritten were as shown in the table below, all figures representing percentages of market price prior to the offerings.

A similar study by Reis & Chandler,

New York, for 20 selected utility companies, also used in the Commonwealth Edison proceedings, showed that all underwritten rights issues since 1948 involved an average cost of 11.2 per cent.

Mr. Childs' study also showed that total underpricing would have totaled 11.4 per cent if based only on eight offerings of \$10,000,000 or more in size (excluding the eight that were below that size). He also pointed out that an "unusually favorable market climate has prevailed for several years. Should an offering be made under less favorable market conditions, a revision of such allowance upward would certainly be required."

In this connection it may be pointed out that the Childs study included only two 1953 issues, in April and May. In the first half of June, when utility stocks declined sharply, a number of offerings were made and it would have been interesting if several of these issues had been included. For example, 472,301 shares of Public Service of Indiana were offered to stockholders June 4th at a price of 31 $\frac{1}{2}$, but the stock declined to a low of 29 $\frac{1}{2}$ and the issue was only 20 per cent subscribed. Eight hundred thousand shares of American Gas & Electric were offered at 29 on June 10th (without subscription rights) and the stock declined to a low of 27 $\frac{1}{2}$ during the offering period. Underpricing to allow for a decline of this character would doubtless have exceeded 10 per cent; American

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1. Preoffering pressure	0.9%	(2.6*)
2. Pressure during last five days of rights period	2.4	(3.2*)
3. Subscription price below market price	6.9	
4. Underwriters' fees	1.4	
5. Corporate expenses	1.6	
 Total	 10.8%**	

*Excluding negative results; when the stock price advanced, this could be assumed to be due to general market conditions.

**"Underpricing" may be understood in two ways: (1) the percentage by which the subscription price is below the market price; or (2) in addition, three other cost items—preoffering pressure, underwriters' fees, and corporate expenses. The term is used in the latter sense here, and 10.8 per cent represents the total for items 1, 3, 4, and 5. (Item 2 is taken into account in number 3.)

PUBLIC UTILITIES FORTNIGHTLY

SEPTEMBER FINANCING

PRINCIPAL PUBLIC OFFERINGS OF ELECTRIC AND GAS UTILITY SECURITIES

During September, 1953

Date	Amount (Mill.)	Description	Price To Public	Under- writing Spread	Offer- ing Yields	Moody Rating	Indicated Success of Offering	
<i>Mortgage Bonds and Debentures</i>								
9/2	\$ 8.0	Wisconsin P. & L. 1st 4s 1983 . . .	102.66	.53C	3.85%	A	b	
9/3	35.0	Duke Power 1st 3 1/2s 1983 . . .	102.55	.71C	3.61	Aaa	c	
9/10	6.0	Central Hudson G. & E. Conv. Deb. 3s 1963# . . .	100.75	.75N	2.91	Baa	b	
9/15	20.0	Tennessee Gas Trans. Deb. 5s 1973	101.90	1.35C	4.85	Baa	a	
9/16	7.0	Public Service of N. H. 1st 4s 1983	100.87	.78C	3.95	A	b	
9/18	12.0	Louisiana P. & L. 1st 4s 1983 . . .	100.75	.69C	3.96	A	a	
9/24	12.0	Duquesne Light 1st 3 1/2s 1983 . . .	101.93	.62C	3.52	Aaa	a	
9/30	3.0	Worcester Gas Light 1st 4s 1973 . . .	101.38	.94C	3.90	A	a	
10/1	15.0	Indiana & Mich. Elec. 1st 3 1/2s 1983	102.31	.70C	3.50	Aa	a	
<i>Preferred Stocks</i>								
9/15	10.0	Tennessee Gas Trans. 5.85% (s.f.)	100	3.25N	5.85	—	b	
9/23	25.0	Northern Natural Gas 5 1/4% (s.f.)	100	2.50N	5.50	—	a	
<i>Common Stocks—Subscription Rights</i>								
9/3	6.2	Duke Power . . .	30	*	5.00	9.4	a	
9/10	1.8	Central Hudson G. & E. . .	11.25	—N	6.22	8.1	a	
9/16	1.9	Southern Union Gas . . .	18	*	4.44	6.8	—	
9/18	10.3	New York State E. & G. . .	30.63	.58N	6.20	8.5	—	
9/22	65.2	Pacific G. & E. . .	33.50	—N	5.97	8.5	—	
<i>Common Stocks—Offered to Public</i>								
9/10	6.4	Central Illinois P. S. . .	18.38	.68C	6.53	8.3	a	
9/16	4.8	Duquesne Light . . .	25.88	.50C	6.18	8.4	a	
9/16	5.5**	Mountain Fuel Supply . . .	18.25	1.10N	5.48	7.2	—	

*Not underwritten. **Not a new money issue. #Convertible after July 1, 1954, at 12 for the first \$2,000,000 converted, 12 1/2 for the next \$2,000,000, and 13 for the final \$2,000,000. C—Competitive bidding. N—Negotiated underwriting. a—Reported well received. b—Reported fairly well received. c—Reported that the issue sold somewhat slowly.

SEPTEMBER NEW-MONEY FINANCING

(In Millions)

	Offered to Stockholders	Sold to Public	Sold Privately	Total Financing
<i>Electric Companies</i>				
Bonds . . .	—	\$96	—	96
Preferred Stock . . .	—	—	\$ 5	5
Common Stock . . .	\$83	10	—	93
Total . . .	\$83	\$106	\$ 5	\$194
<i>Gas Companies</i>				
Bonds . . .	—	\$23	\$71	\$94
Preferred Stock . . .	—	34	—	34
Common Stock . . .	\$ 2	—	—	2
Total . . .	\$ 2	\$57	\$71	\$130
Total Electric and Gas . . .	\$85	\$163	\$76	\$324

Source, Irving Trust Company.

OCT. 22, 1953

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Gas & Electric at its low showed a temporary decline of nearly 20 per cent from the 1953 high.

Mr. CHILDS had done some special research on the "market break factor," based on the action of the market during the decade 1941-50. The market break record was analyzed by tabulating the various declines in the Dow utility average during 25-day periods which occurred in each year, classified by the percentage amount of the decline. The 25-day period was selected by assuming that the average subscription period is twenty-two days and that the subscription price is usually set about three days prior to the beginning of the period.

Mr. Childs' conclusion from his research was that 90 per cent of the market declines in the 10-year period amounted to 5 per cent or less; in other words, a 5 per cent allowance for market break would produce satisfactory results about 90 per cent of the time. During three years of the period (1944, 1945, and 1949) a 5 per cent allowance would have assured success; but in three other years there were breaks of 16 per cent or more, and in 1946 one of 19 per cent.

In the 26 offerings studied by the Irving Trust Company the 10 issues which were not underwritten had an average underpricing of 15.4 per cent. But in some of these cases the subscription price may have been set at a lower price than necessary, presumably to give the rights assured value to stockholders; these cases, therefore, were excluded for the purpose of studying underpricing. The 16 underwritten issues allowed 4.5 per cent underpricing as protection against a market break (6.9 per cent subscription

price discount, less 2.4 per cent for market pressure during the last five days of the subscription period). This figure was slightly less than the 5 per cent average which the study of the general market for ten years indicated should be successful about 90 per cent of the time.

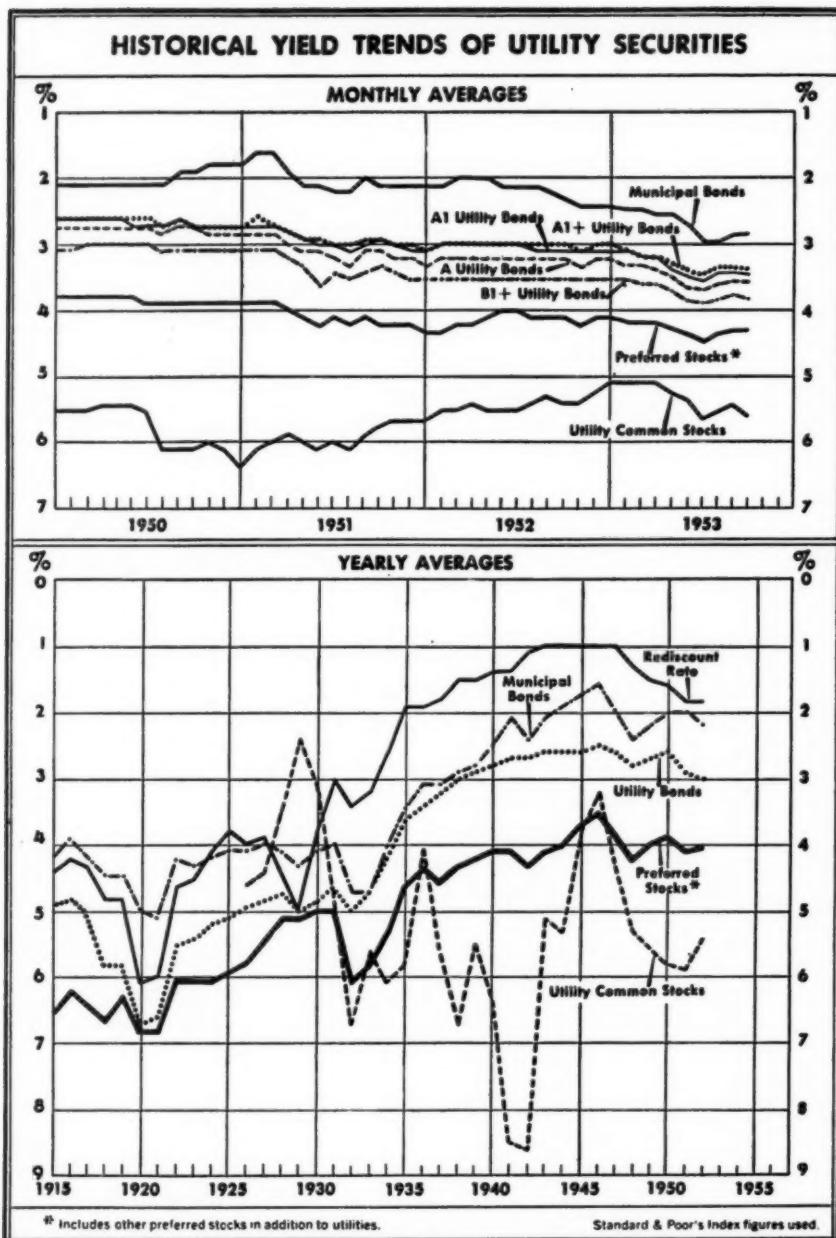
Mr. CHILDS did not make any special study of underpricing of bond offerings, but did present an exhibit to show the underpricing which occurred in connection with the offering of Commonwealth Edison's \$40,000,000 first mortgage 3½s of 1983 (Edison Exhibit 4.7). Although the market for existing issues was fairly level during the registration period, the net cost to the company of the new issue was 3.69 per cent compared with the yield of 3.29 per cent for the outstanding first 3s of 1977. Thus, the cost of the new bonds was 12.2 per cent more than that on the outstanding similar bonds; and even with this underpricing it required about a week to dispose of the issue. Of course the bond market had had a severe case of "jitters" a few weeks earlier.

Bond Market in Sharp Rebound

THE chart on page 590 showing the trend of yields on utility securities, being based on monthly and yearly averages, tends to level off intermediate fluctuations. The final figures in the upper box, reflecting the averages for the month of September, do not fully reflect the recent strength of the bond market, which began about mid-September. The September 30th figures compare with the year's highs and lows as shown in the table below.

	1953 Lows	1953 Highs	September 30
Municipal Bonds	2.43%	3.14%	2.84%
Utility Bonds—A1+	3.07	3.46	3.29
A1	3.09	3.58	3.41
A	3.25	3.72	3.53
B1+	3.49	3.90	3.79
Preferred Stocks	4.13	4.48	4.25
Utility Common Stocks ..	5.04	5.73	5.59

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Despite irregularity in the stock market, Treasurys continued strong as of October 6th, most issues going through their old highs for the year. The bid on the new 3½ per cent government bonds was close to 103, a gain of about 4½ points from the June low. The drop in short-term money rates is said to be due to (1) an increased supply of short-term funds, on the assumption that business won't need as much money as anticipated earlier, in the final quarter this year; (2) indications that the Treasury is almost through with current deficit financing; and (3) purchase of about \$270,000,000 government securities by the Federal Reserve Board during the period August 13th to September 30th.

While the sharpest change has been in short-term paper, the bond market as a whole has improved, facilitating recent utility bond financing.

Fair Value in Recent Rate Cases

In a dissenting opinion in the Indiana Gas & Water Company's recent rate decision (the majority would not grant rate relief to the company), Commissioner Tennis of the public service commission of Indiana called attention to the unsatisfactory reasoning used by the majority in arriving at their decision. With respect to the rate base, he stated that the Indiana and other courts have pointed out "that in determining fair value of property, a commission cannot fail to take into account the present price levels and reproduction costs, and have reversed commissions for failing to do so."

In this connection he cited the following decisions: *Public Service Commission v. Indianapolis Railways*, 225 Ind 656; *Illinois Bell Teleph. Co. v. Illinois Commerce Commission* (Ill Sup Ct 1953) 98 PUR NS 379, 111 NE2d 329; *New England Teleph. & Teleg. Co. v. Public Utilities Commission* (Me Sup Jud Ct 1953) 98 PUR NS 326, 94 A2d 801; *City of Pittsburgh v. Public Utility Commission* (Pa Super Ct 1945) 61 PUR NS 226, 44 A2d 614.

He also quoted the article by John P. Randolph, former general solicitor of the National Association of Railroad and Utilities Commissioners, in the *FORTNIGHTLY* of June 4th,¹ as follows:

The states where the courts have reversed the commission for failure to consider present values have what are called "value statutes." The state law provides that the utility is entitled to earn a fair return upon the value of its property devoted to the service of the public. When the state law reads thus and the regulatory commission applies the strict accounting original cost less depreciation concept in fixing rates, without consideration of other record evidence of value, the commission is in effect asking for a court reversal. Had the value of our money remained constant the courts might have accepted original cost as the best evidence of value.

But in a period of inflation, such as we have had since World War II, the one-half size dollar of today does not represent the same value as the prewar dollar. The regulatory bodies' recent troubles with the courts have in large measure been due to their failure to recognize that today the shrunken dollar is an economic fact of life. . . . (Italics supplied.)

COMMISSIONER Tennis held that the majority "purported" to give some recognition to reproduction costs but had arbitrarily assumed that there would be a leveling off of prices to a point more than 25 per cent below the levels of January 1, 1953.

He also took exception to the majority's disregard of the unamortized balance in 100.5, which it was claimed "was booked without cost to the petitioner and is being amortized without cost." He pointed out that the commission had approved the original purchase price when it authorized issuance of securities in the full amount of such purchase

¹ "The Status of Public Utility Regulation," by the Honorable John P. Randolph. Vol. LI, No. 12, June 4, 1953, p. 740.

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price and therefore should have been considered in the majority's determination of fair value. Among other vigorous criticisms of the majority ruling, he held that an "expert" witness, a research assistant to Professor Waters of Indiana University, had had "no actual training, experience, or knowledge of the business and only a limited knowledge of public utility regulation."

Another interesting excerpt from the dissenting opinion is the following:

... I completely reject the witness Kleinman's theory that the rate of return should be lowered as more weight is given fair value in fixing the rate base. His theories have been rejected by his own employer, the Illinois Commerce Commission, in The Peoples Gas Light & Coke Case [99 PUR NS 361] and have been specifically disregarded as not being credible by the Ohio Public Utilities Commiss-

sion in *Re Cincinnati & Suburban Bell Teleph. Co.* PUCO May 28, 1953. It is obvious that any rates which will produce a net operating income of only \$1,346,015 on a rate base of \$26,000,000 will not provide even a 5½ per cent return. This rate of return would appear to be the absolute rock-bottom rate that could be allowed and far from a fair return.

In connection with the Kleinman testimony, it is interesting to note that the Illinois commission, in the Iowa-Illinois Gas & Electric Company Case, recently granted an increase in electric rates but offset this in part by a gas rate decrease. The most important thing, however, was that the company was granted a fair value rate base about halfway between depreciated original cost and depreciated reproduction cost (plus working capital).

FINANCIAL DATA ON ELECTRIC UTILITY STOCKS

1952 Rev. (Mill.)	9/29/53 Price About	Div. Rate	Cur. Yield	Share			Price- Earnings Ratio	Divi- dend Pay- out
				Cur. Period	% In- crease	12 Mos. Ended		
\$206 S American Gas & Elec. ...	32	\$1.64#	5.1%	\$2.55**	16%	July	12.5	64%
27 O Arizona Public Service ..	16	.90	5.6	1.25	29	July	12.8	72
7 O Arkansas Mo. Power	19	1.10	5.8	1.86	39	June	10.2	59
23 S Atlantic City Elec.	29	1.50	5.2	1.97	15	Aug.	14.7	76
5 O Bangor Hydro-Elec.	27	1.80	6.7	1.80	D5	June	15.0	100
3 O Black Hills P. & L.	20	1.28	6.4	1.84	6	July	10.9	70
79 B Boston Edison	47	2.80	6.0	3.34	D2	June	14.0	83
15 A California Elec. Pr.	9½	.60	6.3	.83	48	June	11.4	72
14 O Calif. Oregon Pr.	25	1.60	6.4	1.65	12	May	15.2	97
48 S Carolina P. & L.	38	2.00#	5.3	2.95	6	Aug.	12.9	68
21 S Central Hudson G. & E.	12	.70	5.8	.91	17	June	13.2	77
15 O Central Ill. E. & G.	26	1.60	6.2	2.30	4	June	11.3	70
25 S Central Ill. Light	37	2.20	5.9	3.26	20	Aug.	11.4	67
35 S Central Ill. P. S.	18½	1.20	6.5	1.53	2	June	12.1	78
8 O Cent. Louisiana Elec.	19	1.00#	5.3	1.51	14	June	12.6	66
25 O Central Maine Power	18	1.20	6.7	1.32	D14	Aug.	13.6	91
88 S Central & South West	21	1.00	4.8	1.59	15	June	13.2	63
8 O Central Vermont P. S.	15	.84	5.6	1.05**	D13	Aug.	14.3	80
83 S Cincinnati G. & E.	19	1.00#	5.3	1.49	4	June	12.8	67
5 O Citizens Utilities	11	.40a	6.6a	.95	16	June	11.6	42
87 S Cleveland Elec. Illum.	51	2.60	5.1	3.77	14	June	13.5	69
2 O Colorado Cent. Power	19	1.12	5.9	1.39	18	June	13.7	81
34 S Columbus & S. O. E.	25	1.60	6.4	2.25	22	June	11.1	71
304 S Commonwealth Edison	35	1.80	5.1	2.31	10	June	15.2	78
8 A Community Pub. Ser.	18	1.00#	5.6	1.54	22	June	11.7	65
1 O Concord Electric	34	2.40	7.1	1.89	D25	Dec.	18.0	127
50 O Connecticut L. & P.	16	.88†	5.5	.97	—	Aug.	16.5	91
17 O Connecticut Power	39	2.25	5.8	2.41	1	June	16.2	93
435 S Consol. Edison	39	2.40	6.2	2.97	24	June	13.1	81
91 S Consol. Gas of Balt.	25	1.40	5.6	2.00**	20	June	12.5	70
137 S Consumers Power	38	2.20	5.8	2.89	17	Aug.	13.1	76

FINANCIAL NEWS AND COMMENT

1952 Rev. (Mill.)	(Continued)	9/29/53		Cur- rent Yield	Share Cur. Period	Earnings*		Price- Earnings Ratio	Divi- dend Pay- out
		Price About	Div. Rate			% In- crease	12 Mos. Ended		
53	S Dayton P. & L.	35	2.00	5.7	2.69	4	June	13.0	74
26	S Delaware P. & L.	26	1.40	5.4	1.93	18	June	13.5	73
6	O Derby G. & E.	22	1.40	6.4	1.52	5	Dec.	14.5	92
173	S Detroit Edison	27	1.60	5.9	1.93	28	Aug.	14.0	83
98	A Duke Power	34	1.50	4.4	2.86	38	June	11.9	52
78	S Duquesne Light	27	1.60	5.9	2.17	5	June	12.4	74
26	O Eastern Utilities Assoc.	30	2.00	6.7	2.62	21	July	11.5	76
8	O El Paso Electric	24	1.20	5.0	2.04	9	July	11.8	59
10	S Empire Dist. Elec.	22	1.40	6.4	2.16	26	June	10.2	65
4	O Fitchburg G. & E.	47	3.00	6.4	3.63	16	Dec.	12.9	83
28	S Florida Power Corp.	26	1.50	5.8	1.95	NC	July	13.3	77
61	S Florida P. & L.	34	1.60	4.7	2.90	14	June	11.7	55
145	S General Pub. Util.	26	1.60	6.2	2.32**	10	June	11.2	69
5	O Green Mt. Power	22	1.30	5.9	1.80	D1	June	12.2	72
37	S Gulf States Util.	24	1.20	5.0	1.64	26	Aug.	14.6	73
19	A Hartford E. L.	52	2.75	5.3	3.36	24	June	15.5	82
4	O Haverhill Electric	38	2.50†	6.6	2.71	5	Dec.	14.0	92
48	S Houston L. & P.	25	1.00	4.0	1.95	23	Aug.	12.8	51
19	S Idaho Power	44	2.00	4.5	3.17	28	June	13.9	63
55	S Illinois Power	37	2.20	5.9	2.75	8	Aug.	13.5	80
33	S Indianapolis P. & L.	38	2.20	5.8	3.08	8	June	12.3	71
16	S Interstate Power	10	.64	6.4	.92	19	June	10.9	70
18	O Iowa Elec. L. & P.	19	1.20	6.3	1.83	20	July	10.4	66
26	S Iowa-Ill. G. & E.	28	1.80	6.4	2.33	8	June	12.0	77
27	S Iowa Power & Light	24	1.40	5.8	1.87	13	June	12.8	75
23	O Iowa Pub. Service	23	1.40	6.1	1.75	7	Aug.	13.1	80
10	O Iowa Southern Util.	21	1.20	5.7	1.96	52	Aug.	10.7	61
41	S Kansas City P. & L.	28	1.60	5.7	2.36	15	Aug.	11.9	68
19	O Kansas Gas & Elec.	35	2.00	5.7	3.20	25	Aug.	10.9	63
32	S Kansas Pr. & Lt.	17	1.12	6.6	1.38	10	June	12.3	81
28	O Kentucky Utilities	18	1.00	5.6	1.64	15	June	11.0	61
6	O Lake Superior D. P.	31	2.00	6.5	2.70	3	June	11.5	74
6	O Lawrence G. & E.	42	2.25†	5.4	2.38	D10	Dec.	17.6	95
59	S Long Island Lighting	17	1.00	5.9	1.24	8	June	13.7	81
36	S Louisville G. & E.	38	1.80	4.7	3.21	20	June	11.8	56
6	O Lowell Elec. Lt.	53	3.35†	6.3	3.63	D2	Dec.	14.6	92
8	O Lynn G. & E.	26	1.60	6.2	1.88	21	Dec.	13.8	85
6	O Madison G. & E.	34	1.60	4.7	2.71	10	Dec.	12.5	59
3	A Maine Public Service	21	1.40	6.7	2.04	41	Aug.	10.3	69
4	O Michigan G. & E.	31	1.35#	7.4a	2.88	6	June	10.8	47
116	S Middle South Util.	25	1.40	5.6	1.96**	3	July	12.8	71
18	S Minnesota P. & L.	38	2.20	5.8	3.98	30	Aug.	9.5	55
2	O Miss. Valley P. S.	24	1.40	5.8	2.12	26	Aug.	11.3	66
2	O Missouri Edison	14†	.70	4.8	1.42	22	June	10.2	49
8	A Missouri P. S.	24	1.20	5.0	2.09	34	Dec.	11.5	57
5	O Missouri Utilities	17	1.00	5.9	1.63	12	June	10.4	61
31	S Montana Power	28	1.60	5.7	2.80	9	July	10.0	57
15	A Mountain States Pr.	16	.84	5.3	1.24	NC	July	12.9	68
105	S New England Elec.	13	.90	6.9	1.25	D2	June	10.4	72
36	O New England G. & E.	15	1.00	6.7	1.39**	16	Aug.	10.8	72
39	O New Orleans P. S.	41	2.25	5.5	2.85	10	July	14.4	79
2	O Newport Electric	35	2.00	5.7	3.60	36	Aug.	9.7	56
63	S N. Y. State E. & G.	32	1.90	5.9	2.67	13	Aug.	12.0	71
189	S Niagara Mohawk Power	26	1.60	6.2	1.92**	D7	June	13.5	83
59	O Northern Ind. P. S.	26	1.60	6.2	2.42	10	Aug.	10.7	66
100	S Northern States Pr.	13	.70	5.4	1.08	23	June	12.0	65
8	O Northwestern P. S.	14	.90	6.4	1.41	13	June	9.9	64
101	S Ohio Edison	37	2.20	5.9	2.99	19	Aug.	12.4	74
32	S Oklahoma G. & E.	25	1.50	6.0	1.96	13	Aug.	12.8	77
13	O Otter Tail Power	23	1.50	6.5	2.42	42	July	9.5	62
314	S Pacific G. & E.	37	2.20	5.9	2.82	41	June	13.1	78
22	O Pacific P. & L.	19	1.10	5.8	1.87	15	June	10.2	59
87	S Penn. Power & Light	33	2.00	6.1	2.67	9	Aug.	12.4	75

PUBLIC UTILITIES FORTNIGHTLY

1952 Rev. (Mill.)	(Continued)	9/29/53 Price About	Div. Rate	Cur- rent Yield	Share Cur. Period		Earnings* % In- crease		Price- Earnings Ratio	Divi- dend Pay- out
					12	Mo.	12	Mo.		
8	A	Penn. Water & Power	35	2.00	5.7	2.31	D9	Dec.	15.2	87
175	S	Philadelphia Elec.	30	1.60	5.3	2.30	5	July	13.0	70
29	O	Portland Gen. Elec.	29	1.80	6.2	2.47	4	Aug.	11.7	73
48	S	Potomac Elec. Power	17	1.00	5.9	1.11	—	July	15.3	90
52	S	Pub. Serv. of Colo.	31	1.60	5.2	2.32	13	June	13.4	69
214	S	Pub. Serv. E. & G.	25	1.60	6.4	1.98	21	June	12.6	81
54	S	Pub. Serv. of Ind.	33	1.80	5.5	2.26	10	July	14.6	80
17	O	Public Serv. of N. H.	27	1.80	6.7	2.02	3	Aug.	13.4	89
8	O	Public Serv. of N. M.	10	.56	5.6	.82	12	June	12.2	68
20	O	Puget Sound P. & L.	23	1.20	5.2	1.58	—	June	14.6	76
43	S	Rochester G. & E.	39	2.24	5.7	3.30	39	June	11.8	68
9	O	Rockland L. & P.	12	.60	5.0	.67	6	Mar.	17.9	90
7	S	St. Joseph L. & P.	18	1.20	6.7	1.61	15	June	11.2	75
33	O	San Diego G. & E.	14	.80	5.7	1.12	12	July	12.5	71
12	S	Scranton Electric	16	1.00	6.3	1.32	22	Aug.	12.1	76
6	O	Sierra Pacific Pr.	27	1.60	5.9	2.96	64	July	9.1	54
127	S	So. Calif. Edison	36	2.00	5.6	2.82	NC	June	12.8	71
27	S	So. Carolina E. & G.	13	.70	5.4	.87	55	June	14.9	80
5	O	Southern Colo. Pr.	11	.70	6.4	1.04	21	May	10.6	67
164	S	Southern Company	14	.80	5.7	1.19	9	Aug.	11.8	67
12	S	So. Indiana G. & E.	24	1.50	6.3	2.13	22	Aug.	11.3	70
1	O	Southern Utah Power	13	1.00	7.7	1.67	46	Dec.	7.8	60
2	O	Southwestern E. S.	15	.96	6.4	1.40	7	May	10.7	69
27	O	Southwestern P. S.	21	1.20	5.7	1.47	17	July	14.3	82
15	A	Tampa Electric	47	2.80	6.0	3.59	23	July	13.1	78
94	S	Texas Utilities	43	2.08	4.8	3.25	18	Aug.	13.2	64
33	S	Toledo Edison	12	.70	5.8	.92	1	June	13.0	76
8	O	Tucson G. E. L. & P.	33	1.60	4.8	2.75	36	June	12.0	58
91	S	Union Electric of Mo.	21	1.20	5.7	1.26	4	June	16.7	95
25	O	United Illuminating	44	2.40†	5.5	2.73	15	Dec.	16.1	88
2	O	Upper Peninsula Pr.	16	1.20	7.5	1.28	D7	June	12.5	94
26	S	Utah Power & Light	31	1.80	5.8	2.76	25	Aug.	11.2	65
77	S	Virginia E. & P.	25	1.40	5.6	1.87	11	Aug.	13.4	75
18	S	Washington Water Pr.	25	1.60	6.4	1.69	2	Aug.	14.8	95
100	S	West Penn Elec.	34	2.20	6.5	3.25	14	July	10.5	68
56	O	West Penn Power	38	2.00	5.3	2.32	7	June	16.4	86
9	O	Western Lt. & Tel.	24	1.60	6.7	2.37	27	June	10.1	68
20	O	Western Mass. Cos.	32	2.00	6.3	2.80	33	Aug.	11.4	71
79	S	Wisconsin Elec. Pr.	27	1.40	5.2	2.12	23	June	12.7	66
29	O	Wisconsin P. & L.	20	1.20	6.0	1.77	16	June	11.3	68
27	S	Wisconsin Pub. Ser.	17	1.10	6.5	1.59	27	July	10.7	69
Averages					5.9%				12.6	73%

Foreign Companies††

187	S	Amer. & For. Power	8½	\$.60	7.5%	\$ 2.18	13%	June	3.9	28%
170	A	Brazilian Trac. L. & P.	10	1.00	10.0	2.96	20	Dec.	3.4	34
15	A	Gatineau Power	21	1.20	5.7	1.62	25	Dec.	13.0	74
26	O	Mexican L. & P.	4	—	—	.90	105	Dec.	4.4	—
8	A	Quebec Power	22	1.20	5.5	1.28	10	Dec.	17.2	94
40	A	Shawinigan Water & Pr.	37	1.45†	3.9	1.91	4	Dec.	19.4	76
17	A	Winnipeg Electric	46	2.40	5.2	7.09	214	Dec.	6.5	34

B—Boston Exchange. A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Decrease. NC—No comparable figures available. *If additional common shares have been recently offered, earnings are adjusted to give effect to the offering. Percentage change is in the balance available for common stock. Tax savings resulting from accelerated amortization of defense facilities are excluded (when separately reported). **Based on average number of shares. a—Also regular annual 3 per cent stock dividend, which is included in the yield. #—Also occasional stock dividends. †—Estimated (rate irregular or includes extras). ††—With exception of American & Foreign Power, these stocks are also listed in Canada, and the Canadian prices are here used. (Curb prices are affected by exchange rates, etc.)



What Others Think

FPC Reports on California-Oregon Interconnection Study

PAST delays in providing new power facilities in the Pacific Northwest at a pace consistent with expanding population and industry have prolonged the power shortage which began in 1948. Reduced stream flows during the fall months of 1951 and 1952 already have resulted in curtailment of industrial power and a loss in aluminum production to the nation. Although major additions to the region's power supply are under construction, several years will elapse before these can be brought into full operation. Should adverse water conditions prevail at any time prior to 1957, the region will suffer power shortages unless steam-electric plants are constructed, or power is obtained from areas with potential production above their own requirements.

Since it is anticipated that northern California will have some surplus power during this period, the view is held that the Northwest shortage could be reduced somewhat if the two areas were strongly interconnected. A report on the feasibility of the California-Oregon 230-kilovolt interconnection was recently released by the Federal Power Commission, which undertook a study of this proposed interconnection in co-operation with the Pacific Gas and Electric Company, the Bureau of Reclamation, and the Bonneville Power Administration.

The purpose of the study was to (1) determine the amount of surplus power in Power Shortage Area 46 (northern California and northwestern Nevada) that could be made available to the Pacific Northwest during the winter season when power supply is critical in the latter area; (2) determine the need for additional power in the Pacific Northwest; (3) develop estimates of the amount of surplus hydroelectric energy available in

the Pacific Northwest and investigate the possibility of using it to replace steam-generated power in California; (4) explore the possibilities of transferring surpluses between areas by means of one or two 230-kilovolt transmission lines; and (5) to investigate the engineering and economic feasibility of the proposed lines.

THE study revealed that, in the event of adverse stream flow conditions, energy shortages or extremely narrow margins of surplus will occur during each of the storage-control months of the period studied—July, 1954-June, 1957. During this same period, the report continued, there will be substantial power margins in PSA 46 (northern California). Although the major portion of the energy margins is in steam-electric plants, and much of it is available only during off-peak hours, the report said it appears that sufficient power could be made available to load two 230-kilovolt interconnections almost continuously during most months, particularly in years of better than adverse flow.

Two possible interconnections were studied. The first was a 230-kilovolt line connecting the Bonneville Power Administration's 230-kilovolt system at Klamath Falls, Oregon, with either the PG&E system in the Pit-Shasta area of northern California or with the Federal 230-kilovolt system at Shasta plant. Studies indicated that the capacity of the tie line would be substantially the same whether it terminates at the Pit 3 plant of the PG&E Company, the Shasta plant of the Bureau of Reclamation, or the Shasta substation of PG&E. In order to determine the feasibility of the line for the most expensive southern terminal considered, economic studies were based on the assumption that the line would

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loop into the Shasta plant and terminate at the Shasta substation (recently renamed Cottonwood substation).

THE second possible interconnection studied was a 230-kilovolt tie between the Bonneville 230-kilovolt system at Roseburg, Oregon, and PG&E's Shasta substation, with a loop into the Shasta plant of the Bureau of Reclamation. Tests were made on Bonneville's A-c analyzer board to determine the transient stability limits of the proposed lines under various system conditions. These tests established the maximum safe loading on the proposed line, or lines, when operated in conjunction with the existing 125-kilovolt interconnection.

Since it is anticipated that there would be significant uncontrollable power swings between these large systems, the maximum capacities determined from the board studies were reduced by 35 megawatts to obtain the average transfer capacity. The capacities so obtained, which included the capacity of the existing line, were further reduced by 50 megawatts to obtain the net increase in capacity due to the proposed 230-kilovolt lines.

The report shows the estimated capital and annual costs of the proposed interconnection for each of the possible southern terminals. The costs considered in determining the economic justification for the proposed interconnections are as shown in the table below.

THE Pacific Northwest system is essentially hydro, the FPC's report notes, and because of the great annual variation in stream flows there are large amounts of secondary energy available except in low flow years. In the PG&E Company system, on the other hand, a high percentage of its capacity is in

steam-electric plants, the report said. On this system, under typical conditions, there would be considerable off-peak steam energy available, although even in full water years steam-electric generation is required for base load operations. The report stated:

Because of these differences, the systems tend to complement each other and a strong interconnection would result in substantial benefits to both areas. It would make possible the transfer of unusable hydroelectric energy from the Pacific Northwest to PSA 46 for the replacement of a corresponding amount of steam-electric generation. During the first twenty-five years of tie-line operation, it is estimated that an annual average of 280,000,000 kilowatt hours of unusable hydro energy in Pacific Northwest, could be delivered to PSA 46 load centers if one 230-kilovolt line is installed, and an annual average of 594,000,000 kilowatt hours with two lines. The incremental costs that would be saved by utilizing this energy in lieu of steam-electric generated were estimated at 3 mills per kilowatt hour. The average annual savings due to steam replacement would be \$796,880 for the first line, and \$893,640 for the second after making allowance for incremental costs of hydro generation.

THE report said the interconnection would make it possible to firm up some of the Pacific Northwest secondary energy by the utilization of steam energy which is unusable under the PSA 46 load curve. It is estimated that with one 230-kilovolt line, 58 megawatts of secondary energy could be firmed up during the first twenty-five years of operation, and that with two lines it would be pos-

	Capital Cost	Annual Cost	
		Federal Financing	Private Financing
Klamath Falls-Shasta Substation ..	\$6,442,000	\$456,170	\$ 834,960
Roseburg-Shasta Substation	9,404,000	646,860	1,199,810

Both lines are via the Shasta power plant and include costs for line and substation facilities necessary to loop into the Shasta plant.

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WHAT OTHERS THINK

sible to increase the firm capacity of the Pacific Northwest by about 159 megawatts. These benefits were evaluated in the study as the difference in cost of firming the hydro in the Pacific Northwest, by steam energy from PSA 46 (incremental production costs), and the costs of firming the hydro by means of a new steam-electric plant in the Pacific Northwest. The average annual values on this basis were estimated to be \$376,000 for the first line and \$648,300 additional for the second.

"In the event of an adverse year in the Pacific Northwest during the period 1954-57," the report continued, "the proposed interconnections would be of particular value in alleviating the power shortage. It would greatly reduce, if not eliminate, the need for curtailment of both firm and interruptible power. No monetary values were given these benefits although it is recognized that they would be substantial." The total evaluated benefits and the total costs of the proposed interconnections were compared, and it was found that the benefits exceeded the costs by appreciable amounts in all cases.

When the studies, upon which the report is based, were nearing completion, the California Oregon Power Company announced plans for major changes in its transmission system. According to its

plans a 230-kilovolt backbone transmission line would extend throughout the company's service area. Should these lines be constructed, the FPC report stated, the second interconnection would be greatly simplified, and could be completed by constructing a 230-kilovolt line from the terminus of the California Oregon Power Company line at Delta, California, to the Shasta power plant and/or the Shasta substation, a maximum distance of about 41 miles.

IN summarizing conclusions reached from the study, the report stated that the proposed interconnection would afford distinct benefits in alleviating any power shortages occurring in the Pacific Northwest in the period 1954-57 and possibly thereafter; it would conserve fuel in California by making available for replacement of steam-electric energy in that area large amounts of hydroelectric energy from the Pacific Northwest which would otherwise be wasted; it would utilize surplus steam-electric energy from PSA 46 which when combined with secondary energy in the Pacific Northwest would increase the firm energy available in that area; and, finally, that the proposed interconnection would be feasible, both from an engineering and economic standpoint.

—F. M.

Notes on Recent Publications

THE AMERICAN COMPETITIVE ECONOMY. The Chamber of Commerce of the United States has a new, glamorous project. It wants to start economic discussion groups throughout the country. To give such groups a start, the chamber has turned out a series of seventeen booklets, ranging from 18 to 56 pages, that can be highly recommended. The experts who wrote the booklets have used all the tools developed by modern empirical research. No pertinent economic subject is ignored, including giantism in business and protectionism in foreign trade. Tax problems are laid out for the decision of the study groups, and labor will find much to approve and ponder. *The American Competitive Economy*. Seventeen pamphlets. Chamber of Commerce of the United States, Washington, D. C. 1953. Price, \$6.

THE UNION CONTRACT CLAUSE FINDER. Recommended as a must for all labor negotiators and a very valuable tool for all echelons of management is this new publication. It is based upon a painstaking analysis of 3,000 union contracts and presents the best thinking of the outstanding labor negotiators in the country on contract clauses which repeatedly show up in management-union negotiations.

Under appropriate headings are presented specific contract items with clauses which have been selected because they will work, be acceptable to unions, and protect the prerogative of management. *The Union Contract Clause Finder*, by the staff of Employee Relations Bulletin. National Foremen's Institute, New London, Connecticut. 1953. Price, \$7.50.



The March of Events

In General

FPC Examiner Files Decision

A DECISION was filed recently by Presiding Examiner William J. Costello of the Federal Power Commission issuing a 50-year license to California Oregon Power Company, of Yreka, California, for a proposed hydroelectric project on the Klamath river in Klamath county, Oregon.

The license, however, is conditioned to require that the company may not commence construction until it has reached an agreement with the Department of the Interior for the continued

utilization after 1967 of water stored by an upstream Federal reclamation dam.

The proposed project would be virtually a stream flow plant, and dependent upon releases of water from the government's Link river dam at the outlet of Upper Klamath Lake. Estimated to cost about \$9,000,000, it would include a diversion dam, 52 feet high and 310 feet long, which would divert water through a long tunnel to a powerhouse containing two 37,000-horsepower water wheels connected to two 25,000-kilowatt generators.

Kentucky

Gas Rate Increase Approved

THE state public service commission recently approved a \$251,212-a-year rate increase for Central Kentucky Natural Gas Company.

The company had asked for \$349,000.

It said the additional money was needed to meet higher material costs and increases in the wholesale rates it pays.

The commission's order said the increase would make the company's gross income approximately \$3,010,000 a year.

New

Plan Called Socialism Bar

THE chairman of the New York State Power Authority said recently that its proposal to develop more power at Niagara Falls would erect a "bulwark against Socialism." John E. Burton told the Albany Kiwanis Club that the authority "would develop the power in co-operation with the private utilities, and not in competition with them."

The authority and five utility companies seek Federal authorization to join

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New York

Canada in a multimillion-dollar project that would triple the power output from the falls.

Burton said it would be "creeping Socialism" for the state to develop the power and sell it directly to consumers. "There is no reason why the state should engage in the transmission of power," he said.

Seeks Rise in Home Rates

THE trend toward increasing use of heavy electrical appliances in homes

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is causing inequities in residential electric rates that can be removed only by new rate schedules, the Long Island Lighting Company argued recently before the state public service commission. The concern's proposed rates would raise the average bill about 3 cents a month, it was said.

The utility described panel heating and electrical water pumps as devices that caused such heavy drains as to necessitate redesign of transmission and

production equipment. The problem arises not from the amount of electricity used in any period, the company explained, but from the number of kilowatts that must pass into a house at a given moment.

Under present schedules, a rate engineer for the company testified the average consumer of electricity pays part of the cost of supplying the heavy users, whose ranks were said to be increasing rapidly.

Pennsylvania

Atomic Power Use Studied

DUQUESNE LIGHT COMPANY early this month announced it was studying the use of atomic energy for the production of electric power. The utility, which serves 420,000 customers in Pennsylvania, has joined with Walter Kidde Nuclear Laboratories, Inc., of Garden City, New York, in making an agreement with the Atomic Energy Commission for the project.

Under the contract with the AEC, the two companies will investigate nuclear reactors now in operation and under design or construction, and the commission will give them access to information and make available some of its personnel and that of its contractors for consultation purposes.

Because of its access to relatively low-cost coal in western Pennsylvania, Duquesne Light has been able to generate electricity from coal at a cost far less per ton than the average paid by utilities throughout the country. Although it is

doubtful that atomic energy could compete with coal as a low-cost fuel in the Pittsburgh area for some years to come, the utility said it is exploring its potentialities "in order to insure the company's continuing production of electricity at minimum cost."

Asks Gas Rate Rise

THE Peoples Natural Gas Company has asked the state public utility commission for a \$5,300,000 rate increase, effective December 1st, that would raise charges about 13 per cent for 226,000 domestic, commercial, and industrial consumers in western Pennsylvania.

The increase would be added to a \$4,900,000 rate rise already granted, effective October 15th.

The utility's president said the new rate schedule was needed to meet rising costs not covered by the previously approved increase and to meet an earnings deficiency of \$1,800,000.

Utah

Rate Increase Application Filed

AN application for permission to raise all its natural gas rates approximately one cent per thousand cubic feet, to offset increased costs of its purchased supplies and higher royalties, was filed with the state public service commission

on October 1st by the Mountain Fuel Supply Company.

The company's president said the proposed rates would cover only the higher price the company pays for its commodity and would not increase the rate of return.



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Debt Amortization Not Included in Cost of Capital

A GAS company's application for a rate increase was denied by the Wisconsin commission, except to the extent necessary to cover the increased cost of purchased gas, where present rates were yielding a return of 6.3 per cent on a revised rate base. The commission excluded from the rate base about \$36,000 representing production plant abandoned with the introduction of natural gas but allowed the annual amortization of the plant as an expense allowance.

The working capital allowance was reduced in recognition of the fact that about 75 per cent of income tax accruals were available at all times to meet the company's cash needs.

An attempt by the company to determine the return requirement from its cost of capital including amortization of debt was disallowed by the commission with this comment:

While debt may properly be amortized with cash generated within the business it is not the function of the rate of return to provide cash for the amortization of debt. To allow an ad-

ditional return to cover the amortization of debt would, in effect, require consumers to share in the capital cost of the enterprise without participating in the earnings thereof. It would violate the fundamental concepts of regulation.

The commission attached a refund provision to its allowance of an increase of a flat .2 cent per hundred cubic feet to cover the increased cost of purchased natural gas. This provision required the company to pass along that portion of the refund applicable to the period subsequent to the effective date of this order in the following manner: The total dollars of the refund applicable to the period subsequent to the effective date of this order shall be divided by the total hundred cubic feet of gas sold during the same period and the amount a hundred cubic feet so determined shall then be refunded to all customers in proportion to the hundred cubic feet of gas sold to each customer within said period. *Re Wisconsin Southern Gas Co. 2-U-4000, August 7, 1953.*



Parties Unhurt by Holding Company Reorganization Plan May Not Appeal from Approval Order

THE United States Court of Appeals affirmed a judgment of the district court approving an amended holding company reorganization plan on the ground that the parties appealing presented no "case or controversy." The

appeal was taken by the Public Common Stockholders' Protective Committee. It complained about one provision of the plan settling certain intercompany claims. The settlement provided that the holding company should pay to the pub-

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lically held class A stockholders \$1.25 per share more than was paid to the holders of the publicly held common stock.

The common stockholders did not claim that what was paid to them was too small. It simply said in general that the provision should not be in the plan. The court pointed out that these stockhold-

ers were not hurt by anything which had been done and, consequently, held that they had no more standing to complain than "would any stranger on the street who read about the litigation and disapproved the result." *Re Arkansas Nat. Gas Corp. et al. No. 11,041, May 28, 1953.*



Fee Allowance in Holding Company Reorganization Denied

THE United States Court of Appeals denied an individual's claim for compensation for services rendered in a holding company reorganization where his firm had traded in securities of the debtor corporation's subsidiaries. The subsidiaries and the holding company were operated more or less as a single enterprise although their assets were not commingled and separate corporate entities were maintained.

Services for which compensation was sought had been rendered in the organization and work of the 7 per cent preferred stockholders' committee. Prior to the committee's organization, some of the stock had been sold to the claimant's wife.

She sold this stock at a substantial profit after the organization. The

court concluded that this sale precluded the fee allowance.

The claimant contended that his wife sold the stock to a purchaser who was acquiring that stock along with other shares in connection with a plan to have the reorganization proceedings dismissed and that the sale was motivated by his conception of what was best in reorganization strategy. The court, however, did not believe that this justified the allowance of a fee.

The court also held that individual security holders had no standing to appeal from certain allowances made to counsel for a committee for another class of security holders where they did not appear in the court below to object to such fees. *Re Central States Electric Corp. Nos. 6616, 6621, July 16, 1953.*



Meter Electric Rates Substituted for Flat Rates

THE Montana Board of Railroad Commissioners, ex officio public service commission, authorized the Mountain States Power Company to substitute meter rates for flat rates. Obvious discriminations would be eliminated and users would be paying for only such service as they actually used. Flat rates discriminate against the smaller user and tend to induce waste.

The company has experienced a substantial growth in demand for electric service during the past several years. It now purchases additional energy requirements from the Bonneville Power Administration under a 20-year contract. Substantial savings are being realized by the company by virtue of this contract.

The commission concluded that these savings should be passed along to the consumer. The adoption of the new rate schedule will substantially reduce the cost of service to a majority of the company's existing users.

Schedules being closed out provide for service to each customer through several meters or by flat rate charges. The new rates provide for one meter service to each customer. The new rate schedule was considered beneficial to the consumer because of the need for only one meter and one system of wiring. The billing is more understandable to the customer. Furthermore, the fact that there is only one meter to read makes for less time consumed in the over-all meter readings.

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This, too, results in a saving which can be passed on to the user. *Re Mountain States Power Co. Docket No. 4088, Order No. 2400, August 5, 1953.*



Sewerage Extensions at Company Expense Dependent upon Financial Status

A COMPLAINT to require a water company to extend sewerage service at its sole expense was dismissed by the New Jersey Board of Public Utility Commissioners. The company had submitted a plan calling for customer contributions which was unsatisfactory to the proposed customers.

The board recognized the fact that from a strictly physical or construction viewpoint the extension would be reasonable and practicable. The company's financial condition, however, was another factor to be considered. A considerable operating cost had been experienced on sewerage operations. Revenues to be derived from the extension would not equal, or at most would barely equal, interest costs on the total outlay required.

The board said that no matter how desirable the extension may be from the viewpoint of prospective users of the service, there is, under the law, no basis for an order requiring extension by the company at its cost and expense.

A company plan providing for customer contributions was considered reasonable. Under such a plan the company would receive a return of 4.7 per cent on the extension investment, which was considered not excessive. Since the company offered to install service under terms and conditions found not to be unreasonable, no order requiring the installation of the extension upon such terms appeared necessary. *Township of Lakewood v. Lakewood Water Co. Docket No. 7351, June 17, 1953.*



Parent Company's Tax Savings on Consolidated Return Offset by Local Company's Increased Expenses

THE Maryland commission, in making temporary rates permanent for a telephone company, considered such rates, producing a return of 5.90 per cent, to be fair and reasonable. Since a proper capital structure was considered in fixing a return on temporary rates, it was said that it would be unjust not to allow the company to earn the rate found to be reasonable after consideration of such a capital structure.

As in the proceeding fixing temporary rates, the people's counsel claimed that tax savings effected by the company's parent in filing a consolidated return should result in savings to the local company. The commission again rejected such claim, saying that regardless of what position may hereafter be taken, recent wage increases, for which no provision had been made in any of the estimates used in the present proceeding,

would increase the company's operating expenses much more than any conceivable adjustment of Federal income taxes could add to the company's income.

Commissioner Davis, in a dissenting opinion, saw no necessity of converting the temporary into permanent rates on the basis of one or two full months' operating statement. The temporary rates were to remain in effect for nine months, and an additional three months if necessary. If consideration were given to permanent rates after such a period, actual expense would be known and not be a subject of speculation, especially as to savings from conversion from manual to dial. Further, the actual revenues and the actual increase in rate base would, likewise, be definite and not mere estimates. *Re Chesapeake & P. Teleph. Co. Case No. 5257, Order No. 50284, September 11, 1953.*

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Other Important Rulings

A utility operating two departments, commented the Kentucky commission, should not allow the subsidization of the department operating at a loss by the profitable department but should charge each department with a reasonable and just proportion of joint expenses. *Re Union Light, Heat & P. Co.* Case No. 2547, July 22, 1953.

The Maryland Court of Appeals commented that a commission, while it has a duty to see that no change in the operation of public utilities should be made which would work to public detriment, has no right to insist that the public be benefited as a condition to a change of ownership. *Montgomery County v. Public Service Commission*, No. 14, 98 A2d 15.

The Indiana Supreme Court declared commission findings, purportedly the basis for an order approving the lease of a motor carrier certificate, insufficient where the findings of ultimate facts did not contain the substance of the certificate held by the lessor, the substance of certificates held by the lessee, the substance of the contract constituting the lease, the responsibility and capacity of the lessee to render satisfactory and adequate service under the leased certificate, and the existence of any outstanding freight damage, loss, or overcharge claims against both the lessor and the lessee. *Indianapolis & Southern Motor Express v. Public Service Commission*, 112 NE2d 864.

A carrier contracting with a home-rule municipality to collect trash and garbage did not fall within the Colorado commission's jurisdiction where such agreement reserved all authority to the municipality and was merely a practical and expedient manner of exercising the municipality's duty to keep the city free from accumulated trash and garbage as a health measure. *Re Estes (Garbage Service Co.) Application No. 12060, Decision No. 40811*, July 2, 1953.

The Ohio Supreme Court considered a commission order denying discontinuance of certain passenger trains to be unreasonable and unlawful where the particular trains operated at a substantial loss, where no evidence was offered in opposition to the application, and where no municipality or community which would be affected made any protest or entered an appearance. *Baltimore & O. R. Co. v. Public Utilities Commission*, 113 NE2d 240.

A Federal district court, upon reorganization of an interstate railroad, did not disturb Interstate Commerce Commission findings and conclusions as to valuation and capitalization where legal standards were applied, and did not review the commission's appraisal of the weight to be given to testimony of expert witnesses, since questions of capitalization and valuation are matters primarily for the commission. *Re Wisconsin Central Railway Co.* 112 F Supp 916.

The Pennsylvania Superior Court ruled that absolute necessity for a proposed motor carrier extension service was not a requisite factor and that it was not necessary to establish a present demand for service in every square mile of the territory certificated, proof of necessity within the area generally being considered sufficient. *Zurcher v. Public Utility Commission*, 98 A2d 218.

The superior court of Pennsylvania said that the matters for consideration when a railroad seeks to change an agency station to a nonagency one are the volume and nature of the business transacted at the station, the proximity and accessibility of other stations, the ratio of cost of maintenance, including both out-of-pocket and over-all expense, to revenues received, the inconvenience to the public resulting from the removal of the agent, and the nature of services remaining or to be substituted. *Rydal-Meadowbrook Civic Asso. v.*

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Public Utility Commission, 98 A2d 481.

The New Jersey board dismissed, for failure to sustain the burden of proof, a proceeding involving filed tariffs providing for a purchase gas adjustment clause, where the company presented only balance sheets and income statements purportedly reflecting current conditions and on a *pro forma* basis. *Re New Jersey Nat. Gas Co. Docket No. 7613, September 9, 1953.*

The Colorado commission considered taxicab operations in a municipality prior to the date voters delegated jurisdiction over such operations to the commission to be sufficient proof of public convenience and necessity upon application for authority to extend such service. *Re Publix Cab Co. et al. Application Nos. 12444-Extension et al. Decision No. 41032, July 28, 1953.*

The Colorado commission approved a motor carrier extension for the transportation of livestock, notwithstanding existing carriers in the territory, where

the applicant was unable to give complete service because of its restricted authority and where the area in question was undeveloped, with less than average communication facilities, and was entitled to a carrier to take better care of shipping needs. *Re Vancil (Vancil Truck Line) Application No. 12342-Extension, Decision No. 40843, July 9, 1953.*

Although the commission has no authority to create or establish a public highway, ruled the Indiana Supreme Court, it has the power to grant or refuse authority to establish a crossing at a grade approximately 7 feet higher than the existing elevation of railroad rails. *Public Service Commission v. Fort Wayne Union R. Co. 111 NE2d 719.*

The Utah commission canceled filed rates for service rendered by a motor carrier over a route which it had not been authorized to serve. *Re Wally's Motor Line Tariff, Docket No. 93, August 28, 1953.*

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Public Utilities Reports (New Series) are published in five bound volumes a year, with the P.U.R. Annual (Index). These Reports contain the cases preprinted in the issues of PUBLIC UTILITIES FORTNIGHTLY, as well as additional cases and digests of cases. The volumes are \$7.50 each; the Annual (Index) \$6.00. *Public Utilities Reports* also will subsequently contain in full or abstract form cases referred to in the foregoing pages of "Progress of Regulation."

Appendix—Part II

Important addresses on legal, economic, financial, and other problems, delivered before the Public Utility Law Section of the American Bar Association at Boston, September 24, 25, 1953.

Development of the Regulation of Transportation During the Past Seventy-five Years*

By JOHN B. PRIZER**

EW areas of governmental regulation of business affect more vitally the general welfare of the United States than does the regulation of transportation. The vast network of railroads, highways, rivers, and canals which cover the face of the country, the airways above it and the pipelines beneath it—this network is in a very real sense the arterial and venous structure upon which trade and commerce depend. Because the various agencies of transportation serve the needs of commerce, industry, agriculture, and defense, the manner in which they are regulated as well as operated affects not only the whole economy of the nation, but the daily life of all individuals who are a part of or who are benefited by the processes of production and distribution of goods and services. The transportation industry, it has been estimated, represents about 7 per cent of the total national income, and over 3 per cent of the total national labor force, while the total investment therein is over thirty-five billions of dollars.¹

THE economic and commercial importance of transportation alone affords ample justification for the discussion of its regulation before any group; but there are several further reasons why

it is an especially appropriate subject of discussion before such a gathering as is here this morning. In the first place, transportation is regulated very largely, though by no means wholly, through the instrumentalities of independent governmental agencies, principally the Interstate Commerce Commission; and the legal and constitutional problems arising out of the activities of these bodies are of major interest to lawyers whether or not their specialty lies in the field of public utility law. Important segments of administrative and constitutional law have grown out of activities of these commissions, and their work affords significant illustrations not only of the application of that law but of regulation by governmental commissions generally.

In the second place, since the responsibility for the welfare of so many agencies of transportation lies largely with the commissions, it is important to inquire how effectively that regulation operates, whether its operation is within the scope of the purposes for which it was designed, and whether that scope should be modified in furtherance of the national interest in transportation. In the third place, the type of instrumentality employed for this regulation—the independent commission—is one which has also come to be employed in other areas of regulation, such as communication, power, trade, and security issuance, following the examples earlier set in transportation. Accordingly, the question of the desirability of this mode of regulation, by an independent commission as opposed to an executive department, and

* Acknowledgment is made to George L. Haskins, special attorney in the Pennsylvania Railroad Legal Department and professor of law in the University of Pennsylvania, for his substantial and valuable assistance in the preparation of this paper.

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the general question of the relation of the independent commission to other branches of the government, are questions which concern all students of our form of government, and, of course, particularly members of the bar.

Finally, since Federal regulation of transportation began sixty-six years ago, nine years after the formation of the American Bar Association, this topic is an especially fitting one for discussion at this seventy-fifth anniversary meeting of the association.

THE subject of this paper—the development of transportation regulation during the last three-quarters of a century—is obviously so extensive that it cannot be covered in any detail. In fact, the history of that regulation is to a very considerable extent an economic history of the United States for the period involved. Many of the steps which were taken forty, fifty, or even sixty years ago, although of importance to economists and historians, no longer have relevance to the problems with which lawyers, legislators, and administrators are confronted today. Nevertheless, much of the experience of that period is of value today as providing markers which can guide our evaluation of present regulatory processes, as well as our consideration of future adjustments and changes.

It is accordingly my purpose, in presenting this paper, not merely to review the important legislative and judicial developments pertaining to the regulation of transportation, but to discuss its present-day effectiveness from the standpoint of the problems it was and is designed to meet. At the same time, I propose also to discuss a few of the more important problems engendered by the administration of such regulatory legislation and by the conflicting policies pursued in this field by the Federal government and by the state governments.

The development of transportation regulation during the past seventy-five years falls naturally into four periods or stages, each of which is character-

ized by a particular and different set of economic and regulatory factors and events. First is the period prior to 1920, during which the principal provisions of what we know as the Act to Regulate Commerce were developed. This was a period of repressive and disciplinary measures, directed chiefly against the railroads, and enacted for the most part to eliminate abuses or threatened abuses resulting from the expansion of that industry which took place in the great growth of our country after the Civil War. Next is the period from 1920 to 1933, during which the policy of governmental restraint gave way in some measure to an affirmative policy designed to provide the country with an adequate and efficient system of transportation. Third is the period from 1933 to 1940, the period of the depression and of the appearance of competition between the railroads and new and rival modes of transportation—the motor carriers and the airways. This period was characterized by efforts on the part of Congress and other regulatory authorities to regulate these new transportation agencies and to work them into the scheme of regulation already developed for the railroads to the end that there should exist an over-all system of transportation, adequate for the needs of commerce and defense. Finally is the period which began in 1940, in which the harmfulness of outmoded restraints and the failure of legislation to correct the inadequacies of the regulatory pattern were highlighted and brought into sharp focus by the impact of the Second World War and by the stress of the inflationary period which followed.

I.

FEDERAL regulation of transportation may be said to begin in 1887 with the enactment of the Act to Regulate Commerce. However, in order to understand that legislation and the problems it was designed to meet, the antecedent history of trade and carrier regulation at common law and in state legislation is important.

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In medieval English law it was recognized as early as 1367 that persons engaged in what were termed "common" trades or callings were subject to duties and responsibilities which did not apply to others.⁸ Trades or callings were said to be "common" when engaged in as a usual practice, as opposed to intermittent practice or special agreement.⁹ Thus, a "common carrier" denoted one engaged in the business of carrying as a trade. Among the special duties imposed upon common carriers were the duty of care and the duty to serve. It has been suggested that the duty of care imposed upon those engaged in a common calling was based upon the deceit which the person engaged in a common calling practiced on the plaintiff when he induced the plaintiff to trust him and engage his services by the implied representation that he was skilled in his trade, but failed in the exercise thereof.¹⁰ Although the duty to use care was applied to all common callings, the duty to serve was applied only to those common callings which were considered to be affected with a high degree of public interest, because of the extent of public dependence upon them—a dependence which came sharply to the fore as a result of the public emergency created by the Black Death in the fourteenth century and which eventually became crystallized into the concept of being affected with the public interest.¹¹ The duty to serve thus became a distinguishing characteristic of the class of businesses known today as "public callings."

THE special liabilities of innkeepers come to mind at once in this connection. Generally speaking, an innkeeper has a duty to receive guests and he is liable for the loss of his guests' goods, unless it results from specified causes clearly beyond his control.¹² Substantially similar common law liabilities were imposed on common carriers. In 1518 it was said that if a common carrier go by dangerous ways, or in the nighttime, and is robbed, he is liable; and, again, if he overload his horse, and goods are dam-

aged, he is also liable. A contract to relieve a common carrier of this liability was void.¹³

THUS, in early carrier law, the bailment responsibility was an important one, and, as in the case of the innkeepers, the carrier was held liable for losses except when occasioned by defined causes not within his control.¹⁴ Since, in addition, the carrier had a duty to serve, his rates had a tendency to reflect the special service which he thus rendered. Moreover, he was often in position to exact rates in excess of what was thought to be the worth of his service. It is, therefore, not surprising that the courts early undertook to entertain complaints against carriers' rates and subjected them to the test of reasonableness.¹⁵ However, there came to be a substantial difference of opinion, in the early decisions in this country, as to whether or not the common law forbade unjust discrimination in rates.¹⁶ According to one view, a shipper had a right to a reasonable rate, and, if the rate paid by him was reasonable, he had no standing to complain of lower rates granted to others.¹⁷ But "the weight of authority in this country was in favor of an equality of charge to all persons for similar services."¹⁸

These and related common law principles, together with certain legislative controls such as were included in the charters of turnpikes¹⁹ and ferry corporations,²⁰ served sufficiently to protect the public prior to the expansion in and development of railroad transportation in the nineteenth century. With this development, the emphasis which had theretofore been primarily on the liability of carriers growing out of the services rendered turned increasingly in the direction of legislation designed to control the effect of carrier operations upon the needs of trade and commerce. The rapidly growing railroad industry became the area in which an entirely new means of regulation was developed. This began with the state commission movement.

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PRIOR to 1850, the railroads were regarded with great favor by the government, and by the public generally, because their development was viewed as essential to the development of trade and to the opening up of large stretches of new country.¹⁴ For these purposes, turnpikes and canals were inadequate, since their efficient use was hampered by geographical and climatic conditions and also by the comparatively primitive nature of their art of locomotion. Railroad building became almost a mania. Cities and counties vied with one another in subsidizing new routes, and the national government assisted with extensive land grants.¹⁵ Liberal charters further aided the railroads' growth, and few regulations interfered with their free development.¹⁶ Indeed, a chief concern of many people was that railroads would not be built as quickly as they were required.¹⁷ But, as the lines increased in number, competition for traffic likewise increased and with it the need for further revenue. To meet this need the carriers seized upon the means most natural in a free economy. At points where competition was intense, they resorted to price cutting, and this in turn frequently resulted in rates below cost. On the other hand, in areas where there was little or no competition from a rival line, the shipper was often charged extremely high rates for service. Large shippers could frequently command their own rates, but smaller shippers, whose business was less financially attractive, had less bargaining power and could be forced to pay high rates.¹⁸

IN the face of these developments, in many of the early railroad charters and general corporation laws contained provisions designed to ensure reasonable rates,¹⁹ as well as adequate safety provisions,²⁰ and sound financial administration.²¹ But these methods of regulation proved unsatisfactory because of a lack of expert knowledge with respect to railroad enterprises on the part of the state legislatures.²² Rapidly changing conditions in a growing and complex in-

dstry could not be dealt with effectively by legislation without such expert knowledge. Accordingly state commissions were created, as fact-finding bodies at first—adjuncts to the legislatures—to deal with *ad hoc* situations as they arose.²³ For example, in Connecticut a commission was established to supervise the carrying out of charter provisions (1832); in New Hampshire, safety inspection (1844); in Rhode Island, to prevent discrimination in rates and services (1844); and in New York to arbitrate disputes arising out of condemnation (1850).²⁴

The increasing size and complexity of the railroad industry and its problems soon outgrew these *ad hoc* commissions and an integrated approach to the general problem of railroad regulation became necessary. This need gave rise to the development of the first permanent state commissions, the so-called "advisory commission," of which Massachusetts soon (1869) became the model.²⁵ This type of commission had sweeping authority to investigate the financial and physical conditions of the railroads, to inquire into the reasonableness of rates, and to propose legislation upon any phase of railroad operations or of the industry generally; but it had no power in any of these matters except to report its findings and rely on public opinion to enforce compliance.²⁶ Generally speaking, these sanctions were sufficient; for, in the East, many abuses incident to the earlier period of rapid railroad growth had disappeared, and relative stability had been introduced²⁷ in the 1870's. The advisory commission was adopted in most of the New England states and also became the model for other states, such as New York and Wisconsin.²⁸ In 1887 there were 15 such commissions.²⁹

AT or about the same time, a second type of state commission — what may be termed the "regulatory type" — made its appearance in the Midwest. Unlike the advisory boards of the eastern states, these western commissions were charged with the duty of actually fixing

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maximum rates and were endowed with the authority to enforce their orders, thereby exercising affirmative control over the transportation facilities subject to their regulation.³⁰ This regulatory type of commission was in large measure the outgrowth of the granger movement.³¹ The overdevelopment of railroad systems in the partially settled Midwest had led to particularly severe rate cutting at competitive points; and the farmer, dependent on the railroads to move his crops, but located at noncompetitive points, was at their mercy. Declining prices of agricultural commodities resulting from overproduction were in part responsible for the outcry against high railroad rates and against what was charged by the granger leaders to be the dominance of their economic life by railroad corporations owned and run by eastern interests.³² Farmer protest led directly to the establishment of the regulatory commissions, first in Illinois in 1870, later in Minnesota (1871), and, under the intensified demand caused by the panic of 1873, in Iowa, Wisconsin, and Missouri in that year.³³ Illinois, the seat of the granger movement, provides a typical example of legislation forbidding discriminations in rates and services and giving to the state commission power to fix maximum rates which were declared to be *prima facie* reasonable.³⁴

Although such legislation was denounced by railroad interests as unwarranted interferences with private business,³⁵ and its validity attacked as in violation of charter provisions, the courts, sensitive to the public interest involved, sustained the power of the legislature to exercise broad control with respect to the establishment of rates,³⁶ subject only to judicial review by the courts so as to comport with the requirements of due process.³⁷ In *Munn v. Illinois* (1877) the Supreme Court held that it was within the proper exercise of the police power for a state to regulate businesses "clothed with a public interest."³⁸

IN the course of the next decade, strong commissions of the Illinois type ap-

peared not only in other midwestern states but also in the South and even in New England.³⁹ In 1887, there were ten commissions of the regulatory type.⁴⁰ In addition to the power to determine and enforce rates, these commissions generally had the powers of the so-called advisory commissions; for example, safety inspection and the right to examine accounts.⁴¹

These two types of state commission, the advisory type and the regulatory type, represented attacks on two different kinds of problems brought about by differing needs in particular localities, and perhaps also by differing economic philosophies. In the Midwest, the spectacle of abuses such as cutthroat competition and discrimination already referred to, together with a dislike of eastern interests, produced the strong or regulatory commission. In the East, especially in New England, where there was no comparable problem of overexpansion of railroads, and where the pressure of public opinion exerted a responsible influence, the advisory commission largely served the needs of the community.⁴² However, other needs than purely local ones had begun to appear, and in the early 1880's pressure for uniformity through Federal regulation became marked.⁴³

OF the various factors which contributed to emphasize this need, two in particular should be mentioned. In the first place, it became clear during the late seventies and early eighties that many of the problems which the states had had to face in one form or another would also soon have to be faced by the Federal government because of the extension of railroad facilities throughout the country and the marked increase in interstate as contrasted with purely local hauls. In the second place, in many directions state power fell short of giving what was thought to be the needed relief.⁴⁴

In 1886, the Cullom Committee, reporting to the U. S. Senate,⁴⁵ attempted to articulate public sentiment by presenting a number of causes of complaint

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against the railroads. These included allegedly exorbitant rates, the fact that rates were not a matter of public record, that they fluctuated at the will of the carriers, and that the practice of discriminating in rates and services operated not only against shippers but also against localities. It was charged that rebates and other forms of unfair competition were being resorted to, that pooling was a common practice, and that industrial monopoly was being fostered by such practices. The inequity of charging lower rates for a longer than for a shorter distance was also commented upon as a source of unfairness. Because of the growing industrialization of the country, these problems extended beyond the reaches of state power theretofore exercised, and uniformity of regulation became a desideratum.

UNTIL after the Civil War, *laissez-faire* theories about competition generally as a regulator of commodity prices, and the effectiveness of competition as a regulator of the prices of highway and canal transportation, led to the general belief that competition would be equally effective in controlling railroad rates.⁴⁶ It was not perceived until the development of the steam locomotive had progressed considerably that, unlike highway competition, competition among railroads must by its very nature be competition between rival carriers hauling goods over their own lines, rather than over roads or waterways available to all.

Competition between rival railroad lines, unrestricted as it was, frequently had serious consequences in several directions. In the first place, there was much wasteful duplication of facilities in the same area or territory. In the second place, ruinous rate wars took place during which low, and often absurd, rates were put into effect.⁴⁷ For example, in the 1870's cattle were hauled from Chicago to the East coast at \$5 per car at a time when the normal rate would have been \$110.⁴⁸ Such rate cutting, if widespread, can result not only in the destruc-

tion of weak lines but in the eventual destruction of all lines, as, under the continuing stress of competition, rates generally are progressively forced below out-of-pocket costs. In the third place, the stability which is so essential to an adequate rate structure was rendered impossible by the extreme fluctuations which resulted from widespread rate cutting. Finally, efforts to attract traffic resulted in discrimination among shippers, to the ultimate detriment of both carriers and shippers.

THESE and other difficulties began to be recognized in the 1870's and eighties by the railroads themselves, which took steps to avoid the ruinous effects of uncontrolled competition. Prominent among such efforts were agreements between carriers to maintain specific rates or to pool traffic and revenues.⁴⁹ However, rate agreements broke down sooner or later for want of mutual confidence, and pooling agreements proved unenforceable in the courts.⁵⁰ Such co-operative agreements impressed the public mind, in which the specter of monopoly had become seated, as something sinister to be repressed.⁵¹

Similarly, agreements to divide territory so as to prevent new construction of rival lines were viewed with alarm by a public which believed that the general welfare could be safeguarded only through the strength of "competition" in the form of rival and competing carriers. In such directions governmental authority was and had been largely dormant, and it was widely believed that supplementary regulation was required.⁵² This belief was strengthened by the contemporary popular outcry against business trusts and monopolies, and by the growing demands for restraints on industrial combinations, which led eventually to the passing of the Sherman Act in 1890.⁵³ The railroads' own efforts to control unbridled competition were therefore early doomed to failure.

FROM the standpoint of carrier regulation the Supreme Court's decision in

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1886 of the famous Wabash Case⁵⁴ was of special importance. In this case the court held invalid an Illinois law imposing penalties on a railroad within its limits for charging a larger amount for any shorter distance than it did for a longer distance. After finding invalid a state law which attempts to regulate fares and charges by railroads for a transportation which constitutes a part of commerce among the states, the court said:

That this species of regulation is one which must be, if established at all, of a general and national character, and cannot be safely and wisely remitted to local rules and local regulations, we think is clear from what has already been said. And if it be a regulation of commerce, as we think we have demonstrated it is, and as the Illinois court concedes it to be, it must be of that national character, and the regulation can only appropriately exist by general rules and principles, which demand that it should be done by the Congress of the United States under the commerce clause of the Constitution.⁵⁵

The Wabash decision made Federal regulation of the railroads inevitable.

WHAT precise influence the experience of the state commissions had on Congress in the adoption of the Commerce Act in 1887 it is impossible to assert with assurance. However, their heritage in certain directions is plain. In the first place, the rapid proliferation of state commissions prior to 1887 indicated a quite general acceptance of the principle of commission regulation. In the second place, the atmosphere of antagonism to railroads in which the strong state commissions operated⁵⁶ was reflected in the course of congressional debate and was carried over into the Commerce Act in 1887.⁵⁷ In the third place, many of the successes, as well as the failures, of both the advisory and the regulatory commissions were evidenced in the remedial legislation of the Commerce Act. Finally, the writings of those familiar with the

state commission movement should not be overlooked, for among them were such thoughtful men as Arthur Twining Hadley and Charles Francis Adams.

With the background of the Commerce Act now in mind, it is possible to turn to the act and its subsequent history. That act was, of course, the vehicle for the new and comprehensive regulation to which the railroads became subjected in 1887 and the years following; and, together with its various amendments, it remains today the principal authority under which the railroads are regulated. In addition, as a result of legislation in 1935 and 1940, it has also become the principal vehicle for the regulation of for-hire motor carriers and water carriers as well; and oil pipelines, sleeping car companies, and express companies have likewise come within its jurisdiction. It is accordingly appropriate, in proceeding to discuss the growth of transportation regulation, to direct our attention first to the evolution of the Commerce Act.

IT is not possible, within the limits of this paper, to recount in detail the provisions of the original Commerce Act and its various amendments. However, if the scope of regulation and the problems which brought about the successive steps in its development are properly to be understood, a brief summary of those provisions is required. The 1887 act attempted to deal with some of the problems engendered by unrestricted competition by forbidding many of the objectionable practices reported by the Culom Committee. Its provisions included prohibitions against and penalties for undue preference,⁵⁸ discrimination, rebates,⁵⁹ and pooling.⁶⁰ Carriers were required to publish schedules of rates and fares and were forbidden to deviate therefrom.⁶¹ Rate cutting at competitive points was dealt with by the long-and-short-haul clause, forbidding the charging of a higher rate for a shorter than for a longer distance over the same line or route in the same direction.⁶²

The means adopted for the enforcement and supervision of these provisions

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was the Interstate Commerce Commission, which was also created by the Commerce Act.⁶³ That body was, in addition, given authority to inquire into the management of the business of all common carriers subject to the act and to obtain by subpoena complete information necessary to enable it to perform its duties. The act gave the commission no power to fix rates,⁶⁴ it required merely that rates be "just and reasonable"⁶⁵ and empowered the commission, on finding a rate unreasonable, to issue against it an order which might be enforced in court.⁶⁶

If the powers given to the commission under the original Commerce Act now seem limited and meager, it should be recalled that Congress was dealing with what were regarded as specific abuses in the light of the circumstances of the time. Regulation of carriers on the scale that we know it today was not even contemplated. Indeed, it seems to have been recognized that the process of trial and error was the appropriate manner in which to proceed. One of the major purposes of the act, as we gather from the congressional debates on the bill,⁶⁷ was to provide machinery for securing accurate and expert information necessary to assist Congress in formulating a policy *vis-a-vis* the railroad industry.

Nevertheless, even within the ambit of its powers as they then were, the commission was weak. Its "cease and desist" orders were not binding upon the carriers unless judicially affirmed after lengthy litigation.⁶⁸ Because it infringed upon many of the traditional immunities of the railroads, it met with hostility not only from carriers which resisted its orders but more especially from the courts which frequently retried the commission's cases *de novo*.⁶⁹ Its substantive powers were trimmed by the U. S. Supreme Court, which in 1897 denied that the commission had authority to prescribe rates for the future in lieu of those found unjust or unreasonable.⁷⁰ In the same year, the long-and-short-haul clause was emasculated by the court in

the Alabama Midland Case.⁷¹ However, these and other limitations which the courts placed on the commission's powers were not corrected by Congress for some years. Although the Elkins Act,⁷² sponsored by the railroads for their own protection, put teeth into the law relating to personal discriminations and rebates in 1903, it was not until 1906 that any substantial amendments materially strengthening the Commerce Act were passed.⁷³

FOR several years previously, public opinion had become aroused as a result of freight increases which were believed unwarranted and unreasonable and which were not within the commission's power to investigate,⁷⁴ and also by the belief that railroad consolidations, to which the carriers had been resorting to alleviate the effects of excessive competition, were fostering monopoly power.⁷⁵ The result of these pressures, and of the experience of two decades, was the Hepburn Act, passed in 1906.⁷⁶ The major provisions of that act included the power to prescribe future maximum rates when existing rates are found unreasonable or unlawful, and also to establish joint rates and divisions thereof,⁷⁷ the power to establish through routes when the carriers had refused to do so;⁷⁸ a provision clarifying the commission's power to award reparation;⁷⁹ a provision enlarging the scope of transportation subject to the Commerce Act to include the instrumentalities of shipment and services accessory thereto, such as ventilation, icing, and storage.⁸⁰ Other agencies of transportation were also brought within the commission's jurisdiction—express companies, sleeping car companies, and oil pipeline companies.⁸¹ Subjection of the pipelines to regulation came about largely as a result of the public outcry against monopoly conditions which had become prevalent in the petroleum industry.⁸²

Among the provisions in the Hepburn Act relating to discrimination was the famous commodities clause,⁸³ prohibiting railroads from transporting goods and products of which they were the own-

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ers. This provision was aimed at discriminations in competition by such railroads with independent producers.⁸⁴ Among the most important provisions of the Hepburn Act was one which provided that orders of the commission were to become effective as determined by the commission unless set aside by a court of competent jurisdiction.⁸⁵

HOWEVER, despite the Hepburn Act, a number of problems still remained, and these soon began to press with increasing urgency for solution. At this time, the commission had power to establish rates only upon complaint; it could not initiate a rate action or suspend a new rate which a carrier had established.⁸⁶ Moreover, the original long-and-short-haul clause, following the decision in the Alabama Midland Case in 1897, no longer gave the effective protection for which it had been designed. Finally, a number of attacks on the commission's rate orders had been instituted in the courts, and in the course of the extensive litigation which followed it became clear that many courts were trespassing upon the administrative discretion which it was believed should be in the commission alone.⁸⁷ These and other developments led to the Mann-Elkins Act of 1910.⁸⁸ Under that act, the commission was given power to suspend proposed changes in rates, and the burden of defending the reasonableness of those rates was put on the railroads;⁸⁹ second, the commission was given power to prosecute inquiries on its own initiative and to establish freight classifications;⁹⁰ third, the commission's activity was extended to telegraph, telephone, and cable companies;⁹¹ fourth, the short-lived Commerce Court was established to review the commission's decisions.⁹² The amendment of the long-and-short-haul clause so as to restore the commission's jurisdiction was another provision of the 1910 act.⁹³

IN the course of the next decade, a number of further legislative changes concerning transportation were made, and

several important cases affecting the carriers were decided. In 1911 the Locomotive Boiler Inspection Act⁹⁴ increased the commission's power to enforce safety requirements. In 1912 the Panama Canal Act⁹⁵ forbade ownership by railroads of water common carriers with which the railroads compete for traffic. In 1913 the Commerce Court was abolished, and its jurisdiction was returned to the district courts.⁹⁶

ALSO, in 1913, as a belated consequence of the decision in *Smyth v. Ames*⁹⁷ in 1898 (holding that due process of law required rates which would bring the carriers a fair rate on a fair valuation of their property), the Valuation Act was passed.⁹⁸ Under this act the commission was given the immense task of valuing all the railroads in the United States.⁹⁹ In 1914 the Clayton Act¹⁰⁰ prescribed the acquisition by a corporation engaged in commerce of the stock of another corporation also engaged in commerce where the effect of such acquisition may be substantially to lessen competition.¹⁰¹ Section 10 of the Clayton Act prohibits carriers from purchasing securities or supplies in excess of a named amount from another corporation having interlocking officers or directors except through the most favorable bid determined by competitive bidding under regulations prescribed by the Interstate Commerce Commission. A further provision, § 16, gives the right to injunctive relief for threatened loss or damage through violation of the antitrust laws, but expressly relieves common carriers subject to the provisions of the Commerce Act from suits for injunctive relief for any matter within the competence of the commission, unless brought by the United States.¹⁰² In 1917 the Esch Car Service Act¹⁰³ required the carriers to establish reasonable car service rules with respect to the movement, interchange, and return of cars; and the commission was given power to determine the reasonableness of those rules and to prescribe reasonable ones in lieu of those found unreasonable.

Of the important court decisions in

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this period, the Minnesota Rate Cases (1913)¹⁰⁴ and the Shreveport cases (1914)¹⁰⁵ deserve special mention. The former cases indicated that state control over intrastate rates was to be subordinated to Federal regulation of interstate rates whenever the two conflict.¹⁰⁶ The latter cases held that Congress could authorize the Interstate Commerce Commission to remove discrimination against interstate commerce by prescribing a change in intrastate rates which were so low as to cause the discrimination.¹⁰⁷

THIS brief survey of the principal regulatory provisions enacted by Congress between 1887 and 1917, together with their interpretation in the courts, demonstrates that the law was chiefly concerned in that period with specific abuses or problems which grew out of the rapid development of the transportation industry as a result of the expansion of the American economy. No co-ordinated plan was embodied in this legislation, and no affirmative government policy lay behind it. On the contrary, the steps which were taken in the direction of regulation and the expansion of the commission's jurisdiction reflect for the most part a repressive attitude. Thus, much of the Commerce Act and its amendments was concerned with the attempts to introduce stability into the rate structure, to prevent rate cutting and discrimination, and to proscribe practices which it was thought tended towards monopoly. Other provisions, relating to adequacy of service and facilities and the safety of passengers and employees, exhibited little concern for the welfare of the carriers. By contrast, the period which followed was one in which the regulatory experience was subjected to scrutiny and criticism, and the repressive attitude just noted gave way in some measure to the view that a constructive planning element should enter into the regulatory scheme.

Between these two periods, 1887-1917 on the one hand, and that beginning in 1920 on the other, there intervened a 3-year period of wartime operation by the Federal government which had an im-

portant bearing on the formulation of the legislative policy characterizing the next period. A few words about this period of government operation are required.

IN December of 1917, President Wilson took possession and control of the railroads by proclamation,¹⁰⁸ pursuant to § 1 of the Army Appropriation Act of 1916.¹⁰⁹ The provisions of the proclamation were confirmed and stabilized by the Federal Control Act¹¹⁰ three months later. For more than two years, government operation took the place of the traditional policy of private operation. During this period, the carriers remained subject to all Federal and state laws affecting common carriers, except in so far as they might be inconsistent with provisions of the Control Act or orders of the President.¹¹¹ The act gave the President authority to initiate rates, fares, regulations, and practices, whenever in his opinion the public interest so required, by filing the same with the Interstate Commerce Commission. These rates, fares, and regulations were to be reasonable and just and were to take effect at such time and upon such notice as the President might direct.¹¹² However, the commission could upon complaint initiate a hearing concerning the justness and reasonableness of presidential rate orders or regulations; but in determining any question concerning such rates the commission was to give due consideration to the fact that the transportation systems were being operated under a unified and co-ordinated national control, and not in competition.¹¹³

The act was expressly declared to be emergency legislation enacted to meet conditions growing out of war, and it was provided that nothing therein should be construed as expressing or prejudicing future policy of the government with respect to the ownership, control, or regulation of the railroads.¹¹⁴ Thus, although provision was made for commission review of presidential rate orders, the Commerce Act was in major respects made inoperative, and many of the

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normal functions and processes of the commission were subordinated to the emergency powers.¹¹⁵ Provision was made for the termination of Federal control not later than twenty-one months after the ratification of the peace treaty.¹¹⁶ Early in 1920 legislation providing for the return of the railroads to their private owners was enacted, and government control and operation was terminated in March, 1920.¹¹⁷

Within this short space of twenty-six months numerous weaknesses and disadvantages of government operation had been demonstrated—not the least of which was a deficit of \$1.2 billion resulting therefrom.¹¹⁸ From a positive standpoint, it accentuated the shortcomings of the old scheme of regulation, and it appears to have been almost universally recognized, at the time, that a comprehensive rehabilitation of the regulative structure was required.¹¹⁹

II.

We turn now to the era of governmental policy for fostering and strengthening the national transportation system brought about by a recognition of the importance to the national welfare of sound and adequate transportation and of the need for governmental action toward that end. As early as 1915 it had become plain not only that many railroad problems had not been solved by the Commerce Act and its various amendments, but also that circumstances required some broad investigation of transportation problems generally. In that year President Wilson suggested a commission of inquiry to investigate the entire transportation problem,¹²⁰ and, as a result of that suggestion, a Joint Committee of the House and Senate was created under the chairmanship of Senator Newlands.¹²¹ For many months, prior to the government's taking control of the railroads, this committee conducted extensive hearings focusing attention, not only upon the emergency problems created by national defense needs, but also on the transportation situation generally.¹²² The report of this committee was before the Senate committee which

in 1919 prepared the bill that became the Transportation Act of 1920.¹²³

It appears to have been recognized that the activities of the Interstate Commerce Commission prior to this time were concerned largely with the advancement of shipper interests. Regulation in a disciplinary sense, stemming from the experience of the 1870's and 1880's, had been the governing principle both in legislation and in the commission's activities. The experience of the war years had demonstrated that regulation aimed at strengthening the transportation system was imperative not only for the needs of defense but for the national economy generally.¹²⁴ It was realized that the poor condition of the railroads had resulted in no small measure from the repressive regulations obtaining theretofore; and the necessity for an affirmative approach received impetus from the impaired credit situation which confronted the railroads as a result of heavy losses incurred during the period of government operation during the war.¹²⁵ Under the 1920 act, the commission's main concern became the promotion of an adequate and self-sustaining transportation system. However, restriction and discipline were not discarded, and old restraints applicable to early conditions not only remained but, in some respects, became more deeply seated.

THE comprehensiveness of the 1920 act and of its new approach to the problems it was designed to meet is apparent in the principal provisions of the act. In the first place, restrictions on pooling and the acquisition of other carriers were relaxed, and the commission was authorized to work out a plan for the voluntary consolidation of railroad properties into a limited number of systems.¹²⁶ In the second place, the commission was given authority over railroad security issues as a means of guaranteeing sound financial structure.¹²⁷ Thirdly, it was provided, as a safeguard against wasteful duplication of facilities and against unjustifiable abandonment, that a certificate of public convenience and necessity should be required for the construction

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or abandonment of a rail line.¹²⁸ Fourthly, to guard against harmful rate cutting, the commission was given additional power to override state action in order to establish minimum intrastate rates.¹²⁹ Fifthly, the commission was given power to prevent injurious discrimination by the states against interstate commerce.¹³⁰ Sixth, the provisions temporarily provided by the Esch-Car Act with respect to supervision of car service were made permanent.¹³¹ Seventh, the Railroad Labor Board was created in an effort to work out a means for settling railroad labor disputes and avoiding tie-ups and strikes.¹³² Eighth, and perhaps most important, the commission's rate-making power was modified by imposing on the commission the affirmative duty to fix rates which would bring in a fair return upon the entire railroad investment of the country.¹³³ This provision, § 15a of the Commerce Act, has been interpreted by the commission not as providing a guaranty to the carriers, but rather "in [the] exercise of our rate-making power the result shall reflect our best judgment as to the basis which may reasonably be expected for the future to yield the prescribed return."¹³⁴ The fair rate of return was then stated to be about 5.75 per cent¹³⁵ upon a fair value.¹³⁶ Finally, the famous "recapture clause," providing for the recapture of earnings exceeding a prescribed rate of return, was enacted to limit the possibility of what were thought to be excessive earnings and at the same time to help out the financially weak carriers.¹³⁷

THE significance of the 1920 Transportation Act has been set forth succinctly by Mr. Justice Brandeis in the New England Divisions Case (1921):¹³⁸

Transportation Act, 1920, introduced into the Federal legislation a new railroad policy. . . . Theretofore, the effort of Congress had been directed mainly to the prevention of abuses; particularly, those arising from excessive or discriminatory rates. The 1920 act sought to ensure, also, adequate transportation service. That such was

its purpose, Congress did not leave to inference. The new purpose was expressed in unequivocal language. And to attain it, new rights, new obligations, new machinery, were created. The new provisions took a wide range. Prominent among them are those specially designed to secure a fair return on capital devoted to the transportation service. Upon the commission, new powers were conferred and new duties were imposed.

The credit of the carriers, as a whole, had been seriously impaired. To preserve for the nation substantially the whole transportation system was deemed important. By many railroads funds were needed, not only for improvement and expansion of facilities, but for adequate maintenance. On some, continued operation would be impossible, unless additional revenues were procured. A general rate increase alone would not meet the situation. There was a limit to what the traffic would bear. . . . Moreover, it was not clear that the people would tolerate greatly increased rates (although no higher than necessary to produce the required revenues of weak lines) if thereby prosperous competitors earned an unreasonably large return upon the value of their properties. The existence of the varying needs of the several lines and of their widely varying earning power was fully realized. It was necessary to avoid unduly burdensome rate increases and yet secure revenues adequate to satisfy the needs of the weak carriers. To accomplish this two new devices were adopted: the group system of rate making and the division of joint rates in the public interest. Through the former, weak roads were to be helped by recapture from prosperous competitors of surplus revenues. Through the latter, the weak were to be helped by preventing needed revenue from passing to prosperous competitors of surplus revenues. Thus, by marshaling the revenues, partly through capital account, it was planned to distribute augmented earnings, largely in proportion to the carrier's

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needs. This, it was hoped, would enable the whole transportation system to be maintained, without raising unduly any rate on any line. The provision concerning divisions was, therefore, an integral part of the machinery for distributing the funds expected to be raised by the new rate-fixing sections. It was, indeed, indispensable.

THUS, the provisions of the 1920 act make it clear that the government had very much enlarged and modified its rôle with respect to transportation regulation. Pressing economic needs were, as I have said, in large measure responsible for the pattern of its provisions; yet implicit in many of them is the recognition of the fact that enforced competition, which until that time had been the guiding principle, would not work under the repressive conditions which regulation had imposed.

But what should not pass unnoticed is that government, in arrogating to itself under the 1920 act the right to set the over-all pattern of the conduct of railroad business, left to management a much restricted area of function and substantially reduced the opportunity to work out voluntary solutions for the industry's problems. Slavish adherence to old notions about enforced competition required the maintenance of expensive duplication of facilities, as well as wasteful hauls by circuitous lines, which the industry could ill-afford after the depletion of its plant and equipment during the war. The incompatibility of the opposing principles of restraint and promotion was shortly to become apparent.

Although after the passage of the act of 1920 the railroads as a whole entered upon a short era of relative prosperity, these conflicting policies, together with the still impaired credit structure of the carriers, resulted in many of them being unable to withstand the impact of the crash of 1929. Even more serious, however, was the contemporaneous appearance of an entirely new factor: competition from outside the industry by new forms of transport.

DURING the first forty years of Federal regulation, the railroads were by far the most important agency of transportation, although during that time substantial quantities of freight and some passenger traffic moved by sailing vessel and by steamship where water facilities existed. The early years of this century witnessed the development of the passenger automobile and bus, the motor truck and the airplane, and these new media of transportation brought about what has been termed a transportation revolution. Whereas formerly about one hundred large and closely regulated enterprises performed the bulk of the nation's transportation work, now a multitude of motor carriers and the infant air carriers vied with the railroads and with each other for all the traffic they could obtain. To a lesser but nevertheless noticeable degree water carriers also participated in the new struggle for traffic. By the early thirties it came to be realized that the intensified competition for the reduced volume of traffic of the depression years had within it the possibilities of serious impairment or destruction of the transportation system as a whole. The closely regulated railroads, which could not without commission review—and the delays or denials attendant thereon—adjust their rates or services to meet the impact of ruinous competition, were especially hard hit. Railroad receiverships spread across the country, and even the largest lines were in grave financial danger. It was clear that an emergency was at hand and that immediate action was required to stave off the destruction of the railroads—the backbone of the nation's transportation system.¹³⁹

Concurrently, adjustment of the theories and methods of public control was called for to meet the realities created by the transportation revolution and the deteriorated economic situation—not merely to equalize competitive factors, but to impose higher standards of public responsibility on the new agencies and co-ordinate the national transportation system. Attempts of government to

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deal with rival competition and the effects of the depression characterized the third period of regulation from 1933 to 1940.

III.

SHORTLY after President Roosevelt took office in 1933, the Emergency Transportation Act was enacted¹⁴⁰ in response to his recommendation¹⁴¹ that there be created a Federal Co-ordinator of Transportation who would encourage or require the railroads to reduce fixed charges by financial reorganization and eliminate duplicate services and wasteful competitive practices through maintenance of joint facilities and other co-operative action. The Co-ordinator was not, however, permitted to effect economies which would further reduce employment.¹⁴² So far as possible these objectives were to be voluntarily accomplished; but the Co-ordinator was also given authority to issue and enforce orders in accordance with recommendations made by various regional committees of the carriers¹⁴³ or on his own initiative.¹⁴⁴ The act provided for review by the Interstate Commerce Commission of the Co-ordinator's orders,¹⁴⁵ and for court review of the final orders of the commission.¹⁴⁶ However, the Co-ordinator features of the act did not work out as expected: partly because railroad management was not fully sympathetic with the panacea of collective action, but primarily because the provisions of the act designed to protect full employment defeated the objectives of efficiency and reduction of costs.¹⁴⁷

In addition to these emergency measures,¹⁴⁸ the 1933 legislation made permanent amendments to the Commerce Act.¹⁴⁹ The existing provisions for formulation by the commission of a national consolidation plan were repealed, and its powers with respect to consolidations and mergers were modified in other respects so as to make possible voluntary action in such directions on the carrier's own initiative but subject to commission approval.¹⁵⁰ Particularly important—and a step backward as experience has

since shown—was the modification made in the rule of rate making as originally established in the Transportation Act of 1920. The fair-return-on-fair-value standard of that act was eliminated, and in its place was substituted the requirement that the commission in passing on rates shall consider the effect of such rates on the movement of traffic, in addition to considering the public need for adequate service and the carriers' need for sufficient revenues.¹⁵¹ This requirement has sometimes led the commission, in passing on rates, to usurp the function of management in estimating the effect of rate changes on volume of business.¹⁵² The 1933 act also repealed the recapture clause which had proved "cumbersome, wasteful, and largely ineffective."¹⁵³

INTERCARRIER competition was also dealt with, and in this respect the 1933 act made its most lasting and significant contribution. The Co-ordinator was directed to investigate means of improving the conditions of transportation in all its forms and to submit recommendations for corrective legislation.¹⁵⁴ The Co-ordinator advised Congress that the development of destructive competition and general instability throughout the transportation system resulted primarily from the failure of the Federal government to subject all major forms of transportation to similar standards of public control.¹⁵⁵ At this time, motor¹⁵⁶ and air carriers¹⁵⁷ were subject to a certain amount of state but to almost no Federal regulatory control.¹⁵⁸ Some degree of Federal regulation of water transportation existed from an early date, but the legislative scheme called for administration of the various shipping acts by two unrelated governmental agencies, the Interstate Commerce Commission and the Maritime Commission, each having different degrees of control over different types of carriers. Under this scheme many commercial water carriers were completely unregulated, and important types of controls applicable to the railroads were entirely lacking.¹⁵⁹

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In the light of this situation, and of the Co-ordinator's recommendations, legislation was enacted, beginning in 1935, which extended major portions of the existing national regulatory scheme for railroads over commercial highway, air, and water carriers. By the enactment of the Motor Carrier Act of 1935¹⁶³ what had formerly been the Interstate Commerce Act was made Part I of the act and the Motor Carrier Act became Part II. In 1940, Part III was added, and domestic water transportation was thereby also subjected to regulation.¹⁶⁴ The present pattern of the Commerce Act was completed in 1942 by the addition of Part IV relating to freight forwarders.¹⁶⁵ The authority to administer these new parts, as well as Part I, of the act was vested by Congress in the Interstate Commerce Commission. Inconsistently, however, air transportation was singled out for specialized promotional and regulatory treatment by the Civil Aeronautics Act of 1938,¹⁶⁶ which placed the airlines under a separate government agency.

THE controls to which motor and water carriers were subjected call for an analysis, which must be all too brief, of the main provisions of the 1935 and 1940 legislation. The regulation of these forms of transportation was made especially complex by the nature of the service they perform. Although practically all railroads are common carriers, to which a uniform system of regulation can be applied, only perhaps 20 per cent of motor carriers can be described as common, the balance being private carriers, engaged in transporting their own goods, and contract carriers serving a limited class of shippers under special agreement. The application of regulation was made to depend directly on carrier status. Only a limited degree of regulation was provided for contract carriers; and no provisions for the regulation of private carriers by highway or by water were included in Parts II and III of the Commerce Act, except with respect to highway safety and hours of

service.¹⁶⁷ In addition to the exclusion of private carriers, there were numerous exemptions through which much interstate transportation and many interstate carriers have escaped regulation.¹⁶⁸ So far as motor carriers are concerned, the most important exemption, in addition to private carriers, is that found in § 203(b) (6), under which any vehicle used in carrying livestock, fish, or agricultural (and now also horticultural) commodities—a considerable proportion of the nation's transportation—is wholly exempt from the commission's supervision and control, except, as in the case of private carriers, in matters relating to safety. Exemptions for water carriers are substantially more extensive. In fact, the Interstate Commerce Commission has estimated that only about 10 per cent of the total water tonnage is subject to the act,¹⁶⁹ largely because of the exemptions provided in § 303 for the transportation of commodities in bulk. This class of traffic constitutes over 90 per cent of the business of the inland water carriers.¹⁷⁰

The first and perhaps most important step taken in subjecting motor and water for-hire carriers to regulatory control was to provide for their protection against the wasteful and destructive effects of an oversupply of transportation by restricting the field to existing carriers and routes and to those additional carriers whose service could meet the standard of public convenience and necessity prescribed by Congress.¹⁷¹

THE pattern of regulation presently applicable to common carriers by highway and water, to the extent that they are regulated to all, follows with significant exceptions the broad outlines of the pattern which had been developed for railroad regulation. The fundamental prohibitions against unjust discrimination and undue preference have been extended to apply to these agencies, and it is required that all rates and charges shall be just and reasonable.¹⁷² As in the case of the railroads, the regulated motor and water common carriers are uni-

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formly required to file with the commission, and strictly observe, tariffs showing rates, fares, and charges for the services being offered.¹⁶⁹ Parts II and III each contain a rule of rate making not unlike that found in § 15(a) of Part I,¹⁷⁰ and the commission is given the power to prescribe maximum and minimum rates, and to suspend proposed changes in rates.¹⁷¹ Both water carriers and motor carriers are made subject to §§ 5 and 5(a) of Part I of the act relating to pooling, consolidations,¹⁷² and certain types of carrier agreements.¹⁷³ Beyond this point legislative similarity and equality cease, and the first three parts of the Interstate Commerce Act are best compared by their differences.

Under the provisions of the act it is the duty of both railroads and water carriers to establish through routes and joint rates not only for themselves but with each other.¹⁷⁴ Motor carriers of property, however, have no duty to establish through routes and joint rates with other motor carriers or with carriers of different types.¹⁷⁵ Another point of difference is that the commission has not been empowered to prevent the abandonment of any motor or water operation.¹⁷⁶ Whereas both the railroads and the larger motor carriers are subject to regulation with respect to the issuance of securities,¹⁷⁷ the act does not subject water carriers to any financial regulation. Similarly, the long-and-short-haul clause is not made applicable to motor carriers¹⁷⁸ and neither motor nor water carriers are restricted by a commodities clause.¹⁷⁹ Whereas Part I empowers the commission to remove discriminations against interstate commerce by adjusting the level of intrastate rail rates,¹⁸⁰ Parts II and III specifically prohibit Federal interference with intrastate water or highway rates for any purpose.¹⁸¹

BRINGING motor and water carriers into a comprehensive plan of transport regulation not only extended the settled standards of shipper-carrier re-

lationship into new fields; it also posed unprecedented problems of intercarrier competitive relationships, requiring substantial alterations in existing concepts of public control. The scheme of regulation under which these new agencies were brought was one which in theory at least leaves to private management responsibility for the progress, efficiency, and vigor necessary to insure the individual carrier a satisfactory return. It reserves to the government final authority as to who shall engage in for-hire transportation, and in what areas they shall operate; it also reserves authority as to the extent of the service to be rendered, and the price at which the service shall be offered to the public. A fear which found expression in all quarters was that the commission might use its plenary authority over the rates of all carriers to divide traffic among the various forms of transportation as it saw fit and thus nullify certain inherent advantages possessed by each of them.¹⁸²

Congress was urged to make its objectives clear, and this it endeavored to do in 1940 by enacting a declaration of the National Transportation Policy in a concise statement preceding the Interstate Commerce Act.¹⁸³ The mandate of Congress was, among other things, that the act should be administered so as to recognize and preserve the inherent advantages of each mode of transportation within a framework of fair and impartial regulation and to foster sound economic conditions in transportation. It is important to note, however, that no provision was made at this time, or has yet been made, for any co-ordination between the regulation of air transportation on the one hand and the unified control program devised for rail, highway, pipeline, and water agencies on the other.

IV.

A FOURTH period in the evolution of transportation regulation may be said to have begun in 1940. Although an integrated policy for fostering and strengthening transportation in the national interest might have been expected

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to result from the legislation of the thirties and from the declaration of congressional policy contained in the Transportation Act of 1940, that goal has hardly been achieved. In part, the failure of that legislation is attributable to the special conditions brought about by the Second World War, which put an unprecedented strain upon transportation facilities, particularly the railroads. In part, it is attributable to the effects of postwar inflation, which caused labor and material costs to soar with extraordinary rapidity. Chiefly, however, the failure is the consequence of the weaknesses in the regulatory legislation itself and of the unequal and inconsistent regulatory and promotional policies pursued by government agencies and departments—the dangers of which were brought into sharp focus by the stresses of the war and postwar periods.

PROBABLY the outstanding instance of failure of the regulatory system to meet the special exigencies of this period is to be found in the commission's refusal to permit the rail carriers to earn enough even to keep pace with their spiraling cost increases following the war, and far from enough to make promptly possible the repairs and replacements so vitally needed as a result of wartime strains—to say nothing of earning a fair return on investment. Outmoded procedures for hearing and deciding rate increase cases were adhered to by the commission despite their obvious inadequacy for meeting these special circumstances. Protracted hearings; delaying issuance of orders until fully detailed and comprehensive reports could be prepared; emphasis on the effect of rate increases on the movement of traffic and reliance on commission estimates as to such effects rather than on the better-informed judgment of management—these features of the commission's approach to the rail carriers' postwar pleas for increased revenues so delayed and diminished the relief granted that the railroads, instead of being able to regain promptly a reasonable measure of economic strength,

were kept in a precarious condition of impaired credit at a time when sound credit was urgently needed for rehabilitation financing.¹⁸⁴ Even today, a substantial part of the increased revenues which the commission has finally permitted are dependent upon rate increases that have not been allowed to become integrated into the rate structure but are purely temporary in nature, and are, therefore, of little value as a basis for long-range improvement of facilities and services. No other industry, not even other regulated industries, is required to face such conditions.

WHILE the weight of regulation was thus oppressing the railroads' efforts to rehabilitate themselves, their competitors, upon whom regulation weighed much less heavily, were able to seize an opportunity to move forward substantially in the competitive race. Both motor carriers and air carriers achieved material gains following the war in the percentage of the nation's transportation business which they handled.¹⁸⁵ In part this was the result of certain inherent advantages in their transportation service which had become more evident in this period; and, to the extent that this was the case, it accorded with what our national transportation policy does and should allow. But in large measure these forward strides by motor and air carriers were facilitated by inequalities of regulation and by governmental promotion. Thus, while earnings needed for rehabilitation were being denied the railroads, the government continued its subsidies to air and motor transportation (*e.g.*, by furnishing highway, airport, and air navigation facilities without charge or at charges less than cost). At the same time, the large areas of exemption from rate regulation in these transportation fields, together with the relatively liberal policies of the regulatory authorities in admitting new carriers into those fields where regulation applied,¹⁸⁶ were assisting the motor and air carriers substantially to increase their proportion of the transportation busi-

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ness. In addition, as a result of the commission's policy of permitting motor carriers to acquire certificates authorizing them to serve a few shippers for the movement of a limited number of named commodities, those carriers were enabled to select the lucrative, high-grade traffic, while the railroads, unable to be thus selective, became relegated to the position of stand-by carriers obliged to handle the remaining, and often less remunerative, traffic. This discriminatory policy of tailoring certificates to the need of a few shippers, together with the commission's laxness in policing the motor carriers' activities generally, was wholly at variance with the public utility concept and the national transportation policy.^{186a} All this occurred while rigid and comprehensive regulation was limiting railroad earnings and at the same time making impossible effective control of their spiraling costs. The railroads are still, and will continue to be, the backbone of the national transportation system, and that system cannot be healthy unless the railroads are healthy. Inequality and inconsistency in governmental regulatory and promotional policies operated in this period to defeat rather than to advance the national transportation policy's requirement that the inherent advantages of each form of transportation shall be preserved.

THE fourth period of which I have been speaking has also witnessed repeated efforts by government agencies and departments to impose controls over transportation beyond the scope and intent of congressional enactments. Although some of these activities were of the kind that might be expected from the overly bureaucratized government of the time, these efforts also reflected, to a considerable and dangerous extent, an undercurrent in government opinion favorable to the socialization of transport and a political philosophy wholly at variance with the basic principles of our form of government. I do not refer at this point to the Interstate Commerce Commission. But the actions of the

Justice Department, the Commerce Department, and the Post Office Department, as then constituted, and such agencies as the Office of Price Administration and Office of Price Stabilization, were in many respects of such nature that, if not checked, they would inevitably have led to the socialization of the railroads, down whose path other forms of transportation would almost certainly have soon followed. For example, vigorous opposition to rate increases vitally needed for continued railroad solvency was repeatedly pressed by the OPA¹⁸⁷ and in one freight rate case by as many as seven Federal departments and agencies.¹⁸⁸ Similarly, the Post Office Department strenuously resisted increases in mail pay rates, despite the fact that their noncompensatory character was obvious.¹⁸⁹

Illustrative of the activities of the Department of Justice were the so-called Lincoln¹⁹⁰ and Georgia¹⁹¹ cases, in which that department—directly in the one case and indirectly in the other—attacked the railroads' long-established rate conference method of determining rates. Under the guise of antitrust law enforcement, the department in those cases took a position which was nothing short of a bold encroachment upon the Interstate Commerce Commission's administration of the regulatory powers vested in it by Congress. The objective of the Department of Justice planners clearly was to bring about a reduction of rail rates below reasonable levels fixed by the commission, through enforced restoration of the type of competitive rate cutting which had proved so harmful in earlier years.

THE serious threat to the stability of the railroad industry which was posed by this last-mentioned effort of the Department of Justice to legislate beyond congressional enactment was fortunately met in part by the intervention of Congress. The danger was recognized not only by the carriers but by the carriers' customers—on whose behalf the Department of Justice purported to be acting—

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and also by the Interstate Commerce Commission and numerous state commissions; and, as the result of representations made to Congress by these and other groups, the Commerce Act was amended in 1948 by the addition of § 5(a),¹⁹² authorizing approval by the commission of certain types of carrier agreements providing among other things for the rate-conference type of procedures which the department was attacking, and exempting from the anti-trust laws action taken in accordance with such commission-approved agreements. Practically the only opposition to this amendment came from the Department of Justice.¹⁹³

A prime example of governmental indifference to continuance of private enterprise in transportation, in this period, is to be found in the so-called "Reparations Cases"¹⁹⁴ in which the Department of Justice sought to recover from the railroads a large portion of the freight bill paid by the government for the transportation of war materials. Although the amount of reparations which the department sought to exact from the railroads in those cases was in the neighborhood of \$2 billion, according to the department's own estimates,¹⁹⁵ and although the recovery of such a sum would destroy the solvency of the entire industry and make its socialization practically inevitable, the department quite evidently was not concerned with this expectable outcome of its efforts. Some light on the baselessness of the department's complaints in these cases is provided by the recent report of the Interstate Commerce Commission examiners hearing the cases which has recommended their complete dismissal.¹⁹⁶

V.

Up to this point, the development of transportation regulation has been considered primarily with reference to the Commerce Act and its various amendments. This emphasis should not cause us to lose sight of two facts: First, that, although most agencies of transportation are regulated by that act, other

legislation not a part thereof also regulates them; and, second, that there are other agencies of transportation which do not come within the ambit of the Commerce Act and which are regulated by other statutes and by bodies other than the ICC.

Examples of additional legislation applicable to some of the forms of transportation already discussed are to be found, in the Federal field, in such statutes as the Boiler Inspection¹⁹⁷ and Safety Appliance acts,¹⁹⁸ the Panama Canal Act,¹⁹⁹ the Accident Reports Act,²⁰⁰ the Hours of Service Act,²⁰¹ the Federal Employers Liability Act,²⁰² the Railway Labor Act,²⁰³ the Retirement²⁰⁴ and Unemployment Insurance acts,²⁰⁵ and the Transportation of Explosives Act.²⁰⁶ But by far the most important governmental regulation of the forms of transportation so far considered other than that imposed by the Commerce Act is that of state regulatory bodies. As has already been indicated, state regulation of transportation has a long history in our country, going back almost to its beginnings, and that regulation did not cease with the passage of the Interstate Commerce Act, despite the fact that regulation of interstate transportation was by that act placed largely under the jurisdiction of the Interstate Commerce Commission. Many matters relating to intrastate movement, or to the conduct of business within the state, have continued to be regulated by state governments²⁰⁷ — *e. g.*, intrastate rates, issuance of securities, contracts, accounts, service and facilities, investigation of accidents. This is true not only of railroad transportation. Prior to the Motor Carrier Act and the Civil Aeronautics Act, some state regulation of motor carriers and air transportation had developed, and has continued, especially with regard to safety but also in other respects.²⁰⁸

THE limitations of time do not permit further detail with respect to the development of state regulation. The important point is that state regulation has often operated in conflict with Federal regulation, and has, from time to time,

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imposed burdens on the national transportation system which have impeded fulfillment of the national transportation policy. Some relief from inequitable state burdens with respect to rates and fares has been provided by Congress (*e.g.*, under § 13 of the Commerce Act), and by the courts (as in the Minnesota and Shreveport cases and the Wisconsin Passenger Fare Case).²⁰⁹ But detrimental state action still takes place, especially with regard to discontinuance of unprofitable services and allocation of grade-crossing elimination costs.²¹⁰

OUR review of the development of transportation regulation should not conclude without brief reference to those few forms of transportation which are not governed by the Commerce Act. Of these, three deserve special mention: the transportation of natural gas by pipe, which became subject to regulation by the Federal Power Commission in 1938,²¹¹ water carriers engaged in foreign commerce, and between points in the continental U. S. and Alaska and Hawaii, which are under the jurisdiction of the United States Maritime Commission;²¹² and, most important, the airlines, which are under the Civil Aeronautics Board.²¹³ Again, time does not permit a detailing of the regulatory functions of these bodies.

However, a few words should be said about the Civil Aeronautics Act. Passed in 1938, the act contemplated that the Civil Aeronautics Authority, later the Civil Aeronautics Board, should engage in promotional and developmental activities. Accordingly, in addition to provisions with respect to the adequacy and efficiency of service, with respect to rates and charges, discrimination, pooling, and other practices, and with respect to consolidations, mergers, and reports—which provisions are in many respects similar to the regulatory provisions of the Interstate Commerce Act—the Civil Aeronautics Act provides for the encouragement and development of air transportation, the regulation of air commerce in such manner as best to promote its development and safety, and the general

development of civil aeronautics.²¹⁴ Because of the government's interest in promoting air transportation, the airlines have received from the government substantial subsidies,²¹⁵ as, for example, in the air navigation,²¹⁶ and airport facilities²¹⁷ already referred to, which are furnished at charges far below cost, and also in payments for handling United States mail which are presently made on whatever basis is necessary to yield a profit on their over-all operations.²¹⁸

VI

TURNING from the development of transportation regulation to a brief consideration of its effectiveness, I believe it appropriate to emphasize first the many accomplishments of the Interstate Commerce Act under which the greater part of transportation regulation has been and is carried on. Notwithstanding the tendentious thesis of an ill-informed young man that the Interstate Commerce Commission is suffering from a wasting disease and is the captive of the railroad industry,²¹⁹ I am sure that dispassionate and objective study of the history and development of regulation under the Commerce Act will convince intelligent persons that the provisions of that act are remarkable in most respects for their fairness, and that their administration by the ICC over the years has for the most part been excellent.

The act is the product of more than six decades of growth and of adaptation to public and private needs. Its early provisions, which were negative and restrictive, reflected a repressive attitude towards certain widespread evils and also a deep-rooted distrust of monopoly and of concerted action on the part of the railroads. Its subsequent development has been responsive not only to the emergence of specific evils but to new demands created by changing economic conditions, by the appearance of new forms of transportation, and by the industrial growth of our country. Its objectives are now stated in terms of general public interest in a co-ordinated transportation system, and standards of public responsibility

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and of competent, efficient management are prescribed.

MOST of the regulatory control and supervision to which the carriers have been subjected over the years have been beneficial to the public. The act has brought about a large measure of stability in the rate structure and rate relationships, and has practically eliminated discrimination and rebating. The carriers themselves benefit in a number of ways from the regulatory provisions of the Commerce Act, for public and private interests coincide in many respects. Not only are weak carriers protected from the strong, but the strong are protected from what might otherwise result in efforts to destroy one another.²²⁰ Other provisions, such as those with respect to car service and car interchange, are clearly as beneficial to the railroads as they are to shippers and to the public in general. Exemption from the antitrust laws for practices necessary to the efficient conduct of business have likewise proved beneficial to the carriers as well as to shippers. But for such provisions, the carriers would be deluged by lawsuits based on common and statutory law not designed for application to industries which by legislative policy form integral parts of a national system.

It is, moreover, an advantage to carriers that intricate and highly complicated matters relating to their specialized business should come before an expert body which has as thorough and complete knowledge thereof as has the ICC, and which at the same time has demonstrated its independence of political pressures. The established procedures of that body have also done much to insulate the carriers from improper interference by executive action. Moreover, the carrying out and enforcement of the provisions of the Commerce Act before a body having such special expertise have made a material contribution to the development of administrative law, while the testing of commission findings and decisions in the Federal courts has, through judicial review, contributed

much to the development of basic constitutional principles and doctrines—contributions which time does not permit me to review here.

BUT these benefits which have resulted from the regulation of transportation should not close our eyes to the very definite weaknesses in that regulation as it exists today. Those weaknesses have been suggested in what has already been said, and they fall generally into two groups, both bearing particularly heavily on the railroads.

The first is that of the outmoded restraints to which reference has been made—restraints designed to meet specific evils or economic conditions prevalent at the time of their enactment but which have now disappeared or are met by other safeguards. A primary example is the long-and-short-haul clause. Competition with other forms of transportation is today more than sufficient to prevent the abuses of discrimination which that clause was designed to control. Its continued existence serves only as an effective barrier to the exercise of carrier initiative in meeting competition. The commodities clause is another restraint which has outlived its usefulness. A particularly important roadblock, and one which concerns all forms of transportation subject to the Commerce Act, is the requirement in the rule of rate making which has caused the commission at times to assume the managerial function of determining the effect of rates on traffic volume. Proper exercise of the initiative which is so vital to our private enterprise system requires that basic pricing policies, including evaluation of the effect of prices on business, remain a managerial function.²²¹ The rule of rate making should be rewritten, so as to restore to carrier management its proper functions in all forms of transportation. To insure proper direction in the administration of the regulatory scheme, in this and other respects, the principle of free enterprise should be explicitly written into the declaration of national transportation policy—in language that cannot be misinterpreted or distorted.

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Another type of restraint which represents a weakness in the regulatory pattern is that which grows out of the action of state bodies in response to local pressures and interests. Equalization of intrastate rates with commission-approved interstate rates is often impeded, and carrier efforts to control costs by elimination of unprofitable services are frequently frustrated, by state commission acceptance of local demands, contrary to the broader national interest in a strong transportation system. In the absence of a realistic appreciation by state bodies of their responsibilities in this respect, or perhaps of a bolder exercise by the Interstate Commerce Commission of its powers under the Commerce Act, additional legislation to prevent state impairment of the strength of the national transportation system may be required.

In the second group of weaknesses are to be counted the inequalities and inconsistencies of Federal policies of regulation and promotion. The announced policy of Congress, to develop and preserve a national system of transportation capable of furnishing adequate and dependable service according to the inherent capabilities of the several types of carriers, can be implemented, and its objectives realized, only if there is equality of treatment of the various types of carriers, and if regulation does not weigh more heavily on some agencies than on others. But such equality does not exist. The large areas of exemption applicable to motor and water transportation, as contrasted with the railroads, are a primary example of this lack of equality—as is also the failure to integrate air-line regulation with that applicable to other carriers. Subsidization of the railroads' competitors in the motor and water fields,²²⁵ as well as in the airways,²²⁶ is another outstanding example. A particularly striking instance of inequality is to be found in the payroll tax rate of 6½ per cent, which the railroads are obliged to pay under the Railroad Retirement Act,²²⁷ as contrasted with the rate of only 1½ per cent which other

transportation agencies pay for similar purposes.²²⁸

CONTINUED inequality of this kind can lead to substantial impairment or destruction of important segments of the national transportation system—the railroads, particularly, whose rôle as an indispensable medium of mass transportation was again brought home by the events of the recent war period. It is only through the fulfillment of a policy of fair and equal regulation that each form of transportation can make its proper contribution to the national welfare. As stated in a study sponsored not long ago by the Brookings Institution, faulty organization of policy works against the achievements of national transportation objectives. "Government action in this field must be governed by a more coherent set of principles if we are to move in the direction of transportation efficiency and technological progress."²²⁹

The solution of many of these weaknesses lies with Congress, and others with the state commissions and with the Interstate Commerce Commission and, in some instances, with the Federal courts which have not always adequately policed commission decisions of dubious constitutionality.²³⁰ Assuming as we all do that the American public wants an efficient, privately owned transportation system, it is essential that the inequalities brought about by uneven regulation and subsidization be removed. The respective interests of the public and of private management must be recognized, but this is not best effectuated by unequal regulation or overregulation. As Commissioner Arpaia has recently said, "The rôle of government should be to regulate only enough to protect the national interests by keeping transportation sound and rates reasonable."²³¹

THE regulation of transportation in this country has been an evolutionary process. The steps taken in the expansion of governmental control have been gradual, and they have been taken to meet what were regarded as specific

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needs and abuses. The history of the common law and of many institutions (for example, the British parliamentary system) shows that a continual and conscious adaptation to immediate objectives may, if conditions are favorable, lead to a self-consistent and harmonious system.²²⁹ To a considerable degree this has been true of much of the development of Federal regulation of transportation. A scheme of regulation was developed whereby prompt and preventive action by government, through the Interstate Commerce Commission, superseded the limited procedures of redress afforded by the common law.

However, the growing congestion of the conditions of industrial life was such that, by the end of World War I, it was clear that the regulatory scheme, as developed theretofore, was inadequate to meet new needs which were pressing for recognition. In transportation, as in many areas of human activities, it was apparent that what was needed was not so much remedial action in the settlement of disputes as intelligently planned and co-ordinated policy combined with flexible discretion in the public interest to prevent future harm. Indeed, as Dean Pound has so often pointed out, our jurisprudence in this country has turned increasingly in the direction of the recognition of social interests.

CONGRESSIONAL legislation in 1920, and in the 1930's amending the Commerce Act, took account of social interests in enlarging the regulatory scheme which had existed theretofore. With the infusion, however, of a greater degree of policy planning into the regulatory scheme, general principles came to play a more prominent rôle than the trial-and-error techniques of the preceding period, and the emphasis on those principles has tended to impair the proper functioning of the administrative process as the principal means of constructive regulation.

General principles are usually effective within certain limits only and are ineffective beyond them. This is particu-

ly so when such principles are based upon theoretical assumptions (such as the panacea of enforced competition) rather than upon the realities of experience, and when they are regarded as universal in application although embodying only half-truths. When a project of wide scope, such as the regulation of transportation, comes to be controlled by general principles which are carried beyond their proper limits, those principles are to that extent at least no longer applicable.

That some regulation, based on soundly formulated policy, is required is clear. The common law operates by redress or punishment and does not supervise action; it seeks merely to clear the way for effort. The common law, as Dean Pound has said, "leaves individuals free to act, but imposes pains on those who do not act in accordance with the rules prescribed. . . . But it is not quick enough, or automatic enough, to meet the requirements of a complex social organization."²³⁰ Regulation by government "permits the rules for the prevention of socially hurtful conduct to be flexible rules, based on discretion, and thus makes possible the introduction of order in fields not advantageously admitting the application of rules of a rigid and permanent character."²³¹

THE public interest in the prevention of socially hurtful conduct through flexible and discretionary rules does not require supermanagement on the part of the regulatory body or promotional activities whereby the interests of one industry are advanced at the expense of another. Much that has happened in governmental action with respect to transportation in the last thirty years has reflected a concept of regulation which includes both supermanagement and promotional activities. The projection and entrenchment of such a view could easily lead to conditions favorable to the socialization of the entire transportation industry and a complete abandonment of the middle way of regulation which lies between *laissez faire* and government

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ownership. Provided that abstract considerations of principle alone do not become controlling, private rights and the

interests of the community as a whole can be properly safeguarded by sensible and realistic regulation of transportation.



Footnotes

¹ Arpaia, "What Is the I.C.C.?" Address delivered before New Haven Chamber of Commerce, June 12, 1953.

² Arterburn, "The Origin and First Test of Public Callings," 75 *University of Pennsylvania Law Review* 411, 413 (1927); Lord Hale, *De Portibus Maris*, 1 *Hargroves Law Tracts*, 78. ("When private property is affected with the public interest, it ceases to be *juris privati* only.")

³ "The distinction between a common carrier and a private or special carrier is, that the former holds himself out in *common*, that is, to all persons who choose to employ him, as ready to carry for hire—while the latter agrees, in some special case with some private individual to carry for hire." 2 *Story, Contracts* § 919 (fifth edition, 1874).

⁴ Arterburn, *op. cit. supra* note 2.

⁵ *Ibid.* See Lord Hale, *op. cit. supra* note 2.

⁶ Hale, *Bailments and Carriers*, 274 (1896).

⁷ "It is commonly holden in the laws of England, if a common carrier go by the ways that be dangerous for robbing, or drive by night, or in other inconvenient time and be robbed; or if he overcharge a horse whereby he falleth into the water, or otherwise so that the stuff is hurt or impaired; that he shall stand charged for his misdemeanor; and if he would percase refuse to carry it unless promise were made unto him that he shall not be charged for no misdemeanor that should be in him, the promise were void; for it were against reason and good manners, and so in all other cases like. And all these diversities be granted by secondary conclusions derived upon the law of reason, without any statute made in that behalf. And per adventure laws, and the conclusions therein be the more plain, and the more open. For if any statute were made therein, I think verily more doubts and questions would arise upon the statute than doth now when they be only argued and judged after the common law." *Doctor and the Student, Dialogue 2*, c. 38 (1721).

⁸ Hale, *op. cit. supra* note 6, at 351, *et seq.*

⁹ See Heiserman *v. Burlington, C. R. & N. R.* (1884) 63 Iowa 732, 18 NW 903; (*1844*) *Parker v. Gr. Western Ry.* 7 *Man. & G.* 253, 135 *Eng. Rep.* 107.

¹⁰ "Prior to the enactment of the act of February 4, 1887, to regulate commerce . . . railway traffic in this country was regulated by the principles of the common law applicable to common carriers, which demanded little more than that they should carry for all persons who applied, in the order in which the

goods were delivered at the particular station, and that their charges for transportation should be reasonable. It was even doubted whether they were bound to make the same charge to all persons for the same service; (citing cases) though the weight of the authority in this country was in favor of an equality of charge to all persons for similar services." *Interstate Commerce Commission v. Baltimore & Ohio R. Co.* (1892) 145 US 263, 275, 276.

¹¹ *Johnson v. Pensacola & Perdido R. Co.* (1878) 16 *Fla* 623.

¹² *Interstate Commerce Commission v. Baltimore & Ohio R. Co.*, *supra* note 9; *Cooke & Wheeler v. Chicago, Rock Island & Pacific R. Co.* (1890) 81 *Iowa* 551, 46 *NW* 749; Hale, *op. cit. supra* note 6 at 335 *et seq.*

¹³ *Ringwalt, Development of Transportation Systems in United States* 30 (1888).

¹⁴ *Id.* at 34.

¹⁵ Cushman, *The Independent Regulatory Commissions* 20 (1941); Hadley, *Railroad Transportation* 125, 126 (1885).

¹⁶ Schlesinger, *Political and Social Growth of the United States* 7 (1939).

¹⁷ 1 Sharfman, *The Interstate Commerce Commission* 14 (1931).

¹⁸ Hadley, *op. cit. supra* note 14 at 125.

¹⁹ Adams, *Railroads; Their Origin and Problems* 123, 124 (1878).

²⁰ Hartz, *Economic Policy and Democratic Thought* 259 (1948); see *e.g.*, the Charter of the Pennsylvania Railroad, 1846 *Pa Laws* 312.

²¹ Handlin, *Commonwealth, Massachusetts, 1774-1861* 240 (1947).

²² *Ibid.*

²³ Cushman, *op. cit. supra* note 14 at 21.

²⁴ *Ibid.*

²⁵ Hadley, *op. cit. supra* note 14 at 136 *et seq.*

²⁶ Cushman, *op. cit. supra* note 14 at 24; Hadley, *op. cit. supra* note 14 at 137.

²⁷ Adams, *op. cit. supra* note 18 at 138, 139.

²⁸ For a general analysis of all state commissions as of 1888, see Ringwalt, *op. cit. supra* note 12 at 266, *et seq.*

²⁹ Cushman, *op. cit. supra* note 14 at 25.

³⁰ Adams, *op. cit. supra* note 18 at 126-134 (1878).

³¹ Hadley, *op. cit. supra* note 14 at 133-136.

³² Locklin, *Economics of Transportation* 203, 204 (1947).

³³ 1 Sharfman, *op. cit. supra* note 16 at 15.

³⁴ 1873 *Ill Stat* 140.

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⁵⁵ Adams, "The Granger Movement," in *North American Review*, for April, 1875, pp. 394, 422.

⁵⁶ *Munn v. Illinois* (1877) 94 US 113 (a case involving maximum rates for grain storage); *Chicago, etc. R.R. Co. v. Iowa* (1877) 94 US 113, 155; *Peik v. Chicago & N. W. R. Co.* (1877) 94 US 164; *Winona & St. P. R. Co. v. Blake* (1877) 94 US 180; *Ruggles v. Illinois* (1883) 108 US 526; *Illinois C. R. v. Illinois* (1883) 108 US 541 (all cases involving railroad rates).

⁵⁷ The cases cited *Ibid* seemed to indicate that the power to fix rates was vested solely in the legislature and was not reviewable by the courts. However, a dictum in the Railroad Commission Cases (1886) 116 US 307, 331, indicated that the power vested in the legislature was subject to review by the courts to determine the reasonableness of the regulations. *Reagan v. Farmers Loan & Trust Co.* (1894) 154 US 362, squarely held that the regulations must be reasonable and that the courts had the power to review for this purpose.

⁵⁸ *Supra* note 36 at 126.

⁵⁹ Alabama, Georgia, Mississippi, South Carolina, and New Hampshire all had strong commissions by 1887. *Cushman, op. cit. supra* note 14 at 26.

⁶⁰ *Ibid.*

⁶¹ *Id.* at 27.

⁶² Adams, *op. cit. supra* note 18 at 138, 139.

⁶³ Aitchison, "The Evolution of the Interstate Commerce Act: 1887-1937," 5 *George Washington Law Review* 289, 296-300 (1937).

⁶⁴ 1 Sharfman, *op. cit. supra* note 16 at 17.

⁶⁵ 17 *Congressional Record* 1464.

⁶⁶ Adams, *op. cit. supra* note 18 at 117-120.

⁶⁷ Hadley, *op. cit. supra* note 14 at 63 *et seq.*

⁶⁸ Ringwalt, *op. cit. supra* note 12 at 251.

⁶⁹ Adams, *op. cit. supra* note 18 at 150 *et seq.*; Hadley, *op. cit. supra* note 14 at 95-99.

⁷⁰ *Chicago, M. & St. P. R. Co. v. Wabash, St. L. & P. R. Co.* (1894) 61 Fed 993. (This was a suit by one party to a pooling agreement to enforce it against another. Held: contrary to public policy and therefore unenforceable.) *Texas & P. R. Co. v. Southern Pacific R. Co.* (1889) 41 La Ann 970, 6 So 888.

⁷¹ 1 Sharfman, *op. cit. supra* note 16 at 18, 19.

⁷² Aitchison, *op. cit. supra* note 43 at 294-300. ⁷³ 26 Stat 209 (1890), 15 USC §§ 1 *et seq.* (1946).

⁷⁴ *Wabash, St. L. & P. R. Co. v. Illinois* (1886) 118 US 557.

⁷⁵ *Id.* at 576, 577.

⁷⁶ Adams, *op. cit. supra* note 18 at 133 *et seq.* ⁷⁷ 24 Stat 379 (1887), 49 USC §§ 1 *et seq.* (1946).

⁷⁸ Section 3.

⁷⁹ Section 2.

⁸⁰ Section 5.

⁸¹ Section 6.

⁸² Section 4.

⁸³ Section 11.

⁸⁴ 1 Sharfman, *op. cit. supra* note 16 at 25.

⁸⁵ Section 1.

⁸⁶ Section 16.

⁸⁷ 17 *Congressional Record* 444, *et seq.*

⁸⁸ 1 Sharfman, *op. cit. supra* note 16 at 33.

⁸⁹ *Id.* at 24, 25.

⁹⁰ *Interstate Commerce Commission v. Cincinnati, N. O. & T. P. R. Co.* (1897) 167 US 479. The commission had assumed from the beginning, that the basic declaration of the statute that all rates must be just and reasonable, coupled with the obligation imposed upon the commission to execute and enforce the provisions of the act, constituted an adequate grant of authority to prescribe rates. In the above case, the Supreme Court decided "that the power to prescribe rates or fix any tariff for the future is not among the powers granted to the commission."

⁹¹ *Interstate Commerce Commission v. Alabama Midland R. Co.* (1897) 168 US 144. The commission had interpreted § 4 as prohibiting the carriers from charging more for a short haul than for a longer haul except where the commission granted permission after investigation. The commission policy on the consideration of such applications was to regard competition among carriers not within the provisions of the act as a sufficient circumstance to justify a lower charge for the long haul, but competition among carriers which were within the act was not regarded as such a circumstance. In the Alabama Midland Case the Supreme Court held that inter-railroad competition was sufficient to create such dissimilarity between the nearer and more distant point as to validate departures from the long-and-short-haul clause, and held that carriers could depart therefrom without first applying to the commission. Since competition is the primary reason for any disparity in rates between long and short hauls the court's ruling rendered the prohibition of the fourth section practically inoperative.

⁹² 32 Stat 847 (1903). (This act made the published tariff the standard of lawfulness and departure therefrom subject to criminal penalties applicable to the violating corporation. It also gave the district courts jurisdiction to restrain violations.)

⁹³ 1 Roberts, *Federal Liabilities of Carriers*, 166 (1929).

⁹⁴ In its annual report (1903), the commission observed that large rate increases were being made which it had no power to investigate, and hence was unable to determine whether or not they were reasonable. It indicated, however, that the reasonableness of the increases was doubtful in the light of existing economic conditions.

⁹⁵ This consolidation movement was the railroads' answer to competition after pooling and traffic agreements had been declared illegal.

⁹⁶ 1 Sharfman, *op. cit. supra* note 16 at 33 n. 29.

⁹⁷ 34 Stat 584 (1906).

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⁷⁷ Section 4 amending § 15 of the Interstate Commerce Act.

⁷⁸ *Ibid.*

⁷⁹ Section 5 amending § 16 of the Interstate Commerce Act.

⁸⁰ Section 1 amending § 1 of the Interstate Commerce Act.

⁸¹ Section 1 amending § 1 of the Interstate Commerce Act.

⁸² 4 Sharfman, *op. cit. supra* note 16 at 356.

⁸³ Section 1 amending § 1 of the Interstate Commerce Act. "This [clause] was aimed at a particular type of discrimination. It had been found that railroads, which owned coal mines or engaged in the production of other commodities in competition with independent producers, had a distinct advantage over the independents. By charging discriminatory rates the railroad could undersell and force out its competitors, and monopolize the production of the commodity in question. . . . To prevent this type of discrimination, Congress sought to separate the railroad business from other forms of enterprise. In effect, the commodities clause prohibited a railroad from engaging in the production of goods commercially, but the result was accomplished indirectly. The law prohibited a carrier engaged in interstate commerce from transporting articles in interstate commerce which it had produced or in which it had an interest. Lumber, however, was excepted from the rule because of the many small railroads owned by lumbering concerns and constructed as adjuncts of lumbering operations." Locklin, *op. cit. supra* note 32 at 226 (1947).

⁸⁴ 1 Sharfman, *op. cit. supra* note 16 at 42 n. 41.

⁸⁵ Section 4 amending § 15 of the Interstate Commerce Act.

⁸⁶ "While the commission was clothed with authority to prescribe maximum rates for the future, its authority could be exercised only on complaint as to rates already in effect." 1 Sharfman, *op. cit. supra* note 15 at 50.

⁸⁷ *E.g.*, Interstate Commerce Commission *v.* Chicago, G. W. R. Co. (1908) 209 US 108; Chicago, R. I. & P. R. Co. *v.* Interstate Commerce Commission (1909) 171 Fed 680 (reversed (1910) 218 US 88).

⁸⁸ 36 Stat 539 (1910).

⁸⁹ Section 12 amending § 15 of the Interstate Commerce Act.

⁹⁰ *Ibid.*

⁹¹ Section 7 amending § 1 of the Interstate Commerce Act.

⁹² Section 1.

⁹³ Section 8 amending § 4 of the Interstate Commerce Act. "The Mann-Elkins Act restored the long-and-short-haul clause, by striking out the qualifying phrase 'under substantially similar circumstances and conditions.' This made the prohibition of higher charges for shorter than for longer hauls apply unless

exception was approved by the Interstate Commerce Commission. The railroads could no longer disregard the prohibitions of § 4 and plead dissimilarity of circumstances and conditions when an attempt was made to enforce the provisions of the law." Locklin, *op. cit. supra* note 32 at 230.

⁹⁴ 36 Stat 913 (1911).

⁹⁵ 37 Stat 560 (1912).

⁹⁶ 38 Stat 219 (1913).

⁹⁷ (1898) 169 US 466.

⁹⁸ 37 Stat 701 (1913).

⁹⁹ 1 Sharfman, *op. cit. supra* note 16 at 117-132.

¹⁰⁰ 38 Stat 730 (1914).

¹⁰¹ Section 7.

¹⁰² 1 Sharfman, *op. cit. supra* note 16 at 111-117.

¹⁰³ 40 Stat 101 (1917).

¹⁰⁴ (1913) 230 US 352.

¹⁰⁵ Houston E. & W. T. R. Co. *v.* United States (1914) 234 US 342.

¹⁰⁶ 230 US 352, 399.

¹⁰⁷ 234 US 342, 358.

¹⁰⁸ 40 Stat 1733 (1917).

¹⁰⁹ 39 Stat 645. "The President, in time of war, is empowered, through the Secretary of War, to take possession and assume control of any system or systems of transportation, or any part thereof, and to utilize the same, to the exclusion as far as may be necessary of all other traffic thereon, for the transfer or transportation of troops, war material, and equipment, or for such other purposes connected with the emergency as may be useful or desirable."

¹¹⁰ 40 Stat 451 (1918).

¹¹¹ Section 10.

¹¹² Section 10. ". . . that during the period of Federal control, whenever in his opinion the public interest requires, the President may initiate rates, fares, charges, classifications, regulations, and practices by filing the same with the Interstate Commerce Commission, which said rates, fares, charges, classifications, regulations, and practices shall not be suspended by the commission pending final determination."

¹¹³ Section 10.

¹¹⁴ Section 16. "That this act is expressly declared to be emergency legislation enacted to meet conditions growing out of war; and nothing herein is to be construed as expressing or prejudicing the future policy of the Federal government concerning the ownership, control, or regulation of carriers or the method or basis of the capitalization thereof."

¹¹⁵ 1 Sharfman, *op. cit. supra* note 16 at 161-166.

¹¹⁶ Section 14.

¹¹⁷ 41 Stat 456 (1920). For a general discussion and appraisal of this experiment in government operation, see 1 Sharfman, *op. cit. supra* note 16 at 161.

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¹¹⁸ 1 Sharfman, *op. cit. supra* note 16 at 157
n. 35.

¹¹⁹ *Id.* at 172.

¹²⁰ 53 *Congressional Record* 99 (1915).

¹²¹ Cushman, *op. cit. supra* note 14 at 106, 107.

¹²² *Id.* at 116.

¹²³ 41 Stat 456 (1920).

¹²⁴ 1 Sharfman, *op. cit. supra* note 16 at 170-176.

¹²⁵ New England Division Cases (1923) 261 US 184, 190; Locklin, *op. cit. supra* note 32 at 239.

¹²⁶ Section 407, amending § 5 of the Interstate Commerce Act. This provision is a clear indication of the general departure from the reliance on competition as a remedy for the ills of the transportation industry.

¹²⁷ Section 439, amending the Interstate Commerce Act by inserting § 20(a). "While this extension of the commission's authority was designed, indirectly, to protect the investing public against the dissipation of railroad resources through faulty or dishonest financing, its dominant purpose was to maintain a sound structure for the rehabilitation and support of railroad credit, and for the consequent development of the transportation system." 1 Sharfman, *op. cit. supra* note 16 at 190.

¹²⁸ Section 402, amending § 1 of the Interstate Commerce Act, pars. (18) to (22).

¹²⁹ Section 413, amending § 6, par. (13) (c) of the Interstate Commerce Act; § 416, amending § 13, par. (4); § 418, amending § 15, pars. (1), (3). This is another example of the legislature's finally recognizing that "rates that are on a level lower than is reasonably compensatory are not a public benefit." 1 Sharfman, *op. cit. supra* note 16 at 201.

¹³⁰ Section 416, amending § 13 of the Interstate Commerce Act. These provisions recognized the dominance of the commission's rate-making authority, even as applied to intrastate rates, in so far as the exercise of such authority is essential to the effective regulation of interstate commerce.

¹³¹ Section 402, amending § 1 of the Interstate Commerce Act.

¹³² Sections 300-316. The board was abolished by the Railway Labor Act of May 20, 1926, 44 Stat 577 § 14.

¹³³ Section 422, par. (2). The commission was directed to prescribe just and reasonable rates in such rate groups or territories as it may designate, as will earn "an aggregate annual net railway operating income equal, as nearly as may be, to a fair return upon the aggregate value of the property of such carriers held for and used in the service of transportation."

¹³⁴ Rates on Grain, Grain Products & Hay (1921) 64 ICC 85, 99.

¹³⁵ For the 2-year period beginning March 1, 1920, Congress itself fixed the rate of return at 5½ per cent, with provision for the addition of not more than one-half of one per cent, within

the discretion of the commission, to meet expenditures for improvements, betterments, or equipment properly chargeable to capital account, § 422, par. 3. In Increased Rates (1920) 58 ICC 220, 226, the commission allowed the full 6 per cent to the carriers and utilized this rate of return as a basis for its computations. In Reduced Rates (1922) 68 ICC 676, 734, the commission fixed the rate of return to be operative after March 1, 1922, at 5½ per cent. From 1922 to 1948 no statement was made by the commission as to what it considered a fair rate of return. In Increased Freight Rates 1947 (1948) 270 ICC 403, 437, however, the commission indicated that the rates it was approving would afford a return of 5.70 per cent, which it regarded as reasonable. Miller & Cover, *Rates of Return*, 73 (1950).

¹³⁶ In Increased Freight Rates (1948) 276 ICC 9, 18, the commission in arriving at "fair value" said: "This is based upon the original cost, except land and rights, plus the present value of land and rights, and an estimated normal amount of working capital, including materials and supplies, less the recorded depreciation." For a further discussion of what constituted fair value see Miller & Cover, *op. cit. supra* note 135 at 77.

¹³⁷ Section 422, amending the Interstate Commerce Act by inserting § 15(a). "By the recapture clauses Congress is enabled to maintain uniform rates for all shippers and yet keep the net returns of railways, whether strong or weak, to the varying percentages which are fair respectively for them. The recapture clauses are thus the key provisions of the whole plan." Dayton-Goose Creek R. Co. v. United States (1924) 263 US 456, 480. A carrier receiving in any year a net railway operating income in excess of 6 per cent of the value of its railway property, was required to divide such excess equally between two funds: one-half to be placed in the carrier's own reserve fund and the other half to be paid to the commission which was to establish a general railroad contingent fund to be used to make loans to the carriers "in furtherance of the public interest in railway transportation."

¹³⁸ Akron, C. & Y. R. Co. v. United States, (1923) 261 US 184, 189-191.

¹³⁹ Some help was afforded by the Reconstruction Finance Corporation Act of 1932, 47 Stat 5 (1932), which provided for loans to railroads "upon the approval of the Interstate Commerce Commission . . . to aid in the temporary financing of railroads and railways engaged in interstate commerce, to railroads and railways in process of construction, and to receivers of such railroads and railways, when in the opinion of the board of directors of the corporation such railroads or railways are unable to obtain funds upon reasonable terms through banking channels or from the general public and the corporation will be adequately secured . . ." The addition of § 77 to the Bankruptcy Act, 47 Stat 1467 (1933), in an at-

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tempt to facilitate railroad reorganization, was also helpful but neither of these measures gave the permanent help which the situation demanded.

¹⁴⁰ 48 Stat 211 (1933).

¹⁴¹ 77 *Congressional Record* 2888 (1933).

Title I, § 2 of the act sets forth its purposes as follows: "In order to foster and protect interstate commerce in relation to railroad transportation by preventing and relieving obstructions and burdens thereon resulting from the present acute economic emergency, and in order to safeguard and maintain an adequate national system of transportation, there is hereby created the office of Federal Co-ordinator of Transportation. . ." Section 4 "The purposes of this title are (1) to encourage and promote or require action on the part of the carriers and of subsidiaries subject to the Interstate Commerce Act, as amended, which will (a) avoid unnecessary duplication of services and facilities of whatsoever nature and permit the joint use of terminals and trackage incident thereto or requisite to such joint use: *Provided*, that no routes now existing shall be eliminated except with the consent of all participating lines or upon order of the Co-ordinator, (b) control allowances, accessorial services, and the charges therefor, and other practices affecting service or operation, to the end that undue impairment of net earnings may be prevented, and (c) avoid other wastes and preventable expense; (2) to promote financial reorganization of the carriers, with due regard to legal rights, so as to reduce fixed charges to the extent required by the public interest and improve carrier credit; and (3) to provide for the immediate study of other means of improving conditions surrounding transportation in all its forms and the preparation of plans therefor."

^{141a} Title I, § 7(b).

¹⁴² Title I, § 5.

¹⁴³ Title I, § 6.

¹⁴⁴ Title I, § 9.

¹⁴⁵ Title I, § 16.

¹⁴⁶ Locklin, *op. cit. supra* note 32 at 263.

¹⁴⁷ Title I, § 17, provided that the measures in Title I of the act were emergency provisions and were to remain in force for a year unless extended. After two extensions they terminated in 1936, when the office of the Co-ordinator ceased to exist. Joint Resolution 112 approved June 14, 1935, 49 Stat 376.

¹⁴⁸ Title II of the act. 48 Stat 217-221.

¹⁴⁹ Title II, § 202, amending § 5 of the Interstate Commerce Act.

¹⁵⁰ Title II, § 205, amending § 15(a) of the Interstate Commerce Act. (2) "In the exercise of its power to prescribe just and reasonable rates the commission shall give due consideration, among other factors, to the effect of rates on the movement of traffic; to the need, in the public interest, of adequate and efficient railway transportation service at the lowest cost consistent with the furnishing of such service; and to the need of revenues suf-

ficient to enable the carriers, under honest, economical, and efficient management, to provide such service."

¹⁵¹ It is appropriate to add that § 15(a) was further amended in 1940 by qualifying this factor of the effect of rates on the movement of traffic with the words "by the carrier or carriers for which the rates are prescribed" so as to prevent the commission from prescribing railroad rates designed to protect the traffic of another type of carrier. 54 Stat 912 (1940), 49 USC § 15(a) (1946). In Seatrail Lines, Inc. v. Akron, C. & Y. R. Co. (1940) 243 ICC 199, 214, the Interstate Commerce Commission said the meaning of the inserted words "... seems to be that no carrier should be required to maintain rates which would be unreasonable, judged by other standards, for the purpose of protecting the traffic of a competitor."

¹⁵² Title II, § 206(a), amending § 15(a) of the Interstate Commerce Act, 1931 Annual Report ICC, p. 108.

¹⁵³ Title I, § 4(3).

¹⁵⁴ House Document 394, 74th Congress, 2nd session, p. 4.

¹⁵⁵ In 1932 all states except Delaware regulated the transportation of passengers and 39 states had laws regulating the transportation of property by motor vehicle. Co-ordination of Motor Transportation (1932) 182 ICC 263, 371. These laws varied widely as to their content and degree of control.

¹⁵⁶ At least 23 states asserted control over intrastate commerce by air under constitutional or statutory provisions relating to the regulation of common carriers or public utilities. This regulation chiefly involves the granting of certificates of public convenience and necessity. (Locklin, *op. cit. supra*, note 32 at 821.)

¹⁵⁷ The Air Commerce Act of 1926 (44 Stat 568) provided for Federal safety regulation in connection with the registration and rating of aircraft; examination and rating of airmen, navigation facilities, and aviation schools; rating of airlines, and establishment of minimum safety standards and traffic rules. The Railway Labor Act of 1926 (44 Stat 577) was made applicable to employees of commercial airlines. 49 Stat 1189 (1936), 45 USC § 181 (1946). The Air Mail Act of 1934 (48 Stat 933, as amended) gave the Postmaster General power to prescribe schedules and stops for mail planes, as well as an indirect influence over the establishment of routes through his power to award contracts, and that act also gave the Interstate Commerce Commission certain powers and duties in the determination of reasonable rates of compensation for mail-carrying airlines.

¹⁵⁸ The Commerce Act of 1887 gave the Interstate Commerce Commission jurisdiction over carriers engaged in transportation partly by land and partly by water. The Shipping Act of 1916 (39 Stat 728) created the United States Shipping Board and gave it jurisdiction over common carriers by water operating

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in interstate and foreign commerce, but not over inland commerce other than on the Great Lakes. (However, domestic water transportation was later subjected to regulation by the Interstate Commerce Commission, 54 Stat 929 (1940), 49 USC § 901 *et seq.* (1946).) Its jurisdiction was transferred to the Maritime Commission by the Merchant Marine Act of 1936 (49 Stat 1985) and its powers were broadened by the Intercoastal Shipping Act of 1933 (47 Stat 1425) and 1938 (52 Stat 953).

¹⁶⁹ 49 Stat 543 (1935), 49 USC § 301 *et seq.* (1946).

¹⁸⁰ 54 Stat 929 (1940), 49 USC § 901 *et seq.* (1946).

¹⁸¹ 56 Stat 284 (1942), 49 USC § 1001 *et seq.* (1946).

¹⁸² 52 Stat 973 (1938), 49 USC § 401 *et seq.* (1946).

¹⁸³ Commerce Act, § 204 (3).

¹⁸⁴ Section 203, 204; § 303.

¹⁸⁵ Locklin, *op. cit. supra* note 32 at 774, n. 25.

¹⁸⁶ Federal Co-ordinator of Transportation, "Regulation of Transportation Agencies," 73rd Congress, 2nd session, Senate Document No. 152 (1934), p. 7.

¹⁸⁷ Under Parts II and III of the Interstate Commerce Act an applicant for *common* carrier authority must satisfy the commission that he is "fit, willing, and able properly to perform the service proposed" and that such service "is or will be required by the present or future public convenience and necessity." Section 207; § 309(c). An applicant for *contract* carrier authority, however, must demonstrate his fitness, willingness, and ability and show that such operations "will be consistent with the public interest and the national transportation policy." Section 209(b); § 309(g).

¹⁸⁸ Section 216(d); § 305.

¹⁸⁹ Section 217; 306.

¹⁹⁰ Section 216(i); § 307(f).

¹⁹¹ Section 216(e) (g); § 307(b) (g).

¹⁹² Section 5(1)(13).

¹⁹³ Section 5a(1)(A). The commission is also authorized to prescribe uniform systems of accounts and to require reports of both water and motor carriers. Section 220; § 313.

¹⁹⁴ Section 1(4); § 305(b). (Common carriers by water may establish through routes with common carriers by motor vehicle.)

¹⁹⁵ Section 216(c). Common carriers of property by motor vehicle may establish through routes with other such carriers or with railroad, express, or water carriers. Common carriers of passengers by motor vehicle must establish through routes and rates with each other (§ 216(a)) and may establish through routes and rates with carriers by rail or water. (Section 216(c).)

¹⁹⁶ *But cf.* § 1 (18) which prohibits abandonment by rail carriers unless a certificate of convenience and necessity is first obtained from the commission.

¹⁹⁷ Section 20a. of the act gives the commission jurisdiction over the issuance of securi-

ties by railroads. Section 214 extends those provisions to security issues of common and contract motor carriers exceeding specified amounts.

¹⁷⁸ Section 4(1). The long-and-short-haul clause is expressly limited to Parts I and III.

¹⁷⁹ Section 1 (8).

¹⁸⁰ Section 13 (4).

¹⁸¹ Section 216 (e); § 303 (k).

¹⁸² For a brief discussion of the legislative background of the 1940 act see Justice Black, dissenting in *Interstate Commerce Commission v. Inland Waterways Corp.* (1943) 319 US 671, 692 *et seq.* 49 PUR NS 499.

¹⁸³ 54 Stat 899 (1940), 49 USC preceding §§ 1, 301, 901, 1001 (1946).

¹⁸⁴ It has been estimated that delays in granting the rate increases ultimately allowed by the commission have alone deprived the class I railroads of well over \$1 billion in revenues during the years 1946 to 1952, to say nothing of even greater losses of revenue resulting from failure to grant the full increases requested by the railroads. The consequent impairment of railroad credit is emphasized by the fact that return on net investment which averaged only 2.75 per cent in 1946 had recovered to only 3.76 per cent in 1951.

¹⁸⁵ In 1936 commercial highway carriers handled 8.4 per cent of the amount of ton miles of freight handled by the railroads. By 1941 this percentage increased to 11.9 per cent, and then dropped to a low of 6.6 per cent during 1943 and 1944. The 1941 peak was regained in 1947, and by 1949 the motor carriers were handling 17 per cent of the amount of rail freight ton miles. In 1939 domestic scheduled airlines passenger miles amounted to 9.1 per cent of the passenger miles handled in rail sleeping car and parlor car service. By 1941 this percentage increased to 15.1 per cent, and then dropped to a low of 6.6 per cent in 1943. The 1941 peak was surpassed in 1946, and by 1949 the airlines were handling approximately 70 per cent of the rail passenger miles.

¹⁸⁶ Recently the Interstate Commerce Commission has become more restrictive in authorizing new or extended motor carrier operations, and is giving increased recognition to the adequacy of railroad service, as indicated by its recent decisions in *Pacific Intermountain Exp. Co.*—Control and Purchase, 57 MCC 341, 467 (1950-1951); *Kenosha Auto Transport Corp.*—Extension, Gadsden, Ala. 52 MCC 123 (1950); *Long Trans. Co.*—Purchase—*Spreen Bros. M. Exp., Inc.* 58 MCC 561 (1952).

¹⁸⁸ Within a comparatively recent period, the commission has shown signs that it is becoming aware of the destructive effect of the selectivity factor upon the maintenance of a sound transportation system. However, this recent change in the commission's policy cannot easily erase the detrimental effects of its former laxness.

¹⁸⁷ *E.g.*, *Increased Railway Rates, Fares, and Charges* (1942) 248 ICC 545, reopened at

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request of Price Administrator and Secretary of Agriculture with the result that increases previously allowed were suspended, (1943) 255 ICC 357; Increased Freight Rates, 1947 (1947) 269 ICC 33.

¹⁸⁸ Increased Freight Rates, 1951, 280 ICC 179; 281 ICC 557.

¹⁸⁹ Railway Mail, Pay (1947) 269 ICC 357; (1950) 279 ICC 633; (1951) 283 ICC 503.

¹⁹⁰ United States v. Association of American Railroads, 4 FRD 510 (D Ct Neb 1945). Suit was dismissed without prejudice on December 2, 1952, on motion of railroads and government.

¹⁹¹ Georgia v. Pennsylvania R. Co. (1945) 324 US 439, 59 PUR NS 132; suit dismissed (1950) 340 US 889.

¹⁹² 62 Stat 472 (1948), 49 USC § 5 b. (Supp 1951.)

¹⁹³ Senate Report No. 44, March 3, 1947; 1948 U.S. Code Cong. Service 1844, 1845.

¹⁹⁴ One of these cases (Reconstruction Finance Corp. v. Alabama G.S.R. Co. 276 ICC 637) has been decided in favor of the railroads. A proposed report has been issued in the remaining cases, recommending dismissal of the complaints. War Materials Reparation Cases, No. 29572 et al.

¹⁹⁵ Testimony of David Matthews, special assistant attorney general, April 6, 1947, before the Subcommittee of the Committee on Appropriations, House of Representatives, 80th Congress, on the Second Deficiency Appropriation Bill for 1947.

¹⁹⁶ See note 194, *supra*.

¹⁹⁷ 36 Stat 913 (1901), as amended, 45 USC § 22 et seq. (1946).

¹⁹⁸ 27 Stat 531 (1893), 45 USC § 1 (1946).

¹⁹⁹ 37 Stat 560 (1912), 48 USC §§ 1301 et seq. (1946).

²⁰⁰ 31 Stat 1446 (1901), as amended, 45 USC § 38 et seq. (1946).

²⁰¹ 34 Stat 1415 (1907), as amended, 45 USC § 61 et seq. (1946).

²⁰² 35 Stat 65 (1908), as amended, 45 USC §§ 51 et seq. (1946). The First Employers' Liability Act, 34 Stat 232 (1906), was held unconstitutional. The Employers' Liability Cases (1908) 207 US 463.

²⁰³ 44 Stat 577 (1926), as amended, 45 USC § 151 et seq. (1946).

²⁰⁴ 49 Stat 967 (1935), as amended, 45 USC §§ 215 et seq. (1946). The First Retirement Act, 48 Stat 1283 (1934), was held unconstitutional. Railroad Retirement Board v. Alton R. Co. (1935) 295 US 330.

²⁰⁵ 52 Stat 1094 (1938), as amended, 45 USC § 351 et seq. (1946).

²⁰⁶ 35 Stat 554 (1908), as codified, 62 Stat 738 (1948), 18 USC 831 et seq. (Supp 1951).

²⁰⁷ Del. Code, Title 26, §§ 121-156 (1935); Ohio Gen. Code Ann. §§ 487-613 (p. 1946); Pennsylvania Pub. Utility Law, Pa Stat Ann. Tit. 66, § 1101 et seq. (1941).

²⁰⁸ See notes 155 and 156, *supra*.

²⁰⁹ Minnesota Rate Cases (1913) 230 US 352; Houston, E. & W. Texas R. Co. v. Unit-

ed States (1914) 234 US 342 (Shreveport Cases); Railroad Commission of Wisconsin v. Chicago, B. & Q. R. Co. (1922) 257 US 563, PUR1922C 200.

²¹⁰ Despite the obvious fact, so well pointed out by Mr. Justice Brandeis in the Walters Case (Nashville, C. & St. Louis R. v. Walter (1934) 294 US 405, 421-424), that grade-crossing eliminations and protective devices are today primarily for the benefit of highway users, their costs are still in substantial part saddled on the railroads by many state commissions.

²¹¹ 52 Stat 821 (1938), 15 USC § 717 (1946).

²¹² 49 Stat 1985 (1936) 46 USC § 1111 (1946). (See Locklin, *op. cit. supra*, note 32 at 773.)

²¹³ A Civil Aeronautics Authority was created in 1938 (52 Stat 973). Its functions were later consolidated with those of the Air Safety Board, and the authority became the Civil Aeronautics Board. 54 Stat 1235 (1940), 49 USC 401 et seq. (1946).

²¹⁴ 52 Stat 980 (1938), 49 USC §§ 401-402 (1946).

²¹⁵ "For the fiscal year 1951, the Civil Aeronautics Board has estimated that the subsidies to domestic airlines alone amounted to nearly \$35,000,000, or 56 per cent of the total mail payments received by those lines." Budget Message of the President, Budget of the United States for fiscal year ending June 30, 1953, p. M 34.

²¹⁶ Dearing and Owen, *National Transportation Policy*, 17-44 (1949).

²¹⁷ *Ibid.*

²¹⁸ 52 Stat 998 (1938), 49 USC § 486 (b): "In fixing and determining fair and reasonable rates of compensation under this section, the board, considering the conditions peculiar to transportation by aircraft and to the particular air carrier or class of air carriers, may fix different rates for different air carriers or classes of air carriers, and different classes of service. In determining the rate in each case, the board shall take into consideration, among other factors, the condition that such air carriers may hold and operate under certificates authorizing the carriage of mail only by providing necessary and adequate facilities and service for the transportation of mail; such standards respecting the character and quality of service to be rendered by air carriers as may be prescribed by or pursuant to law; and the need of each such air carrier for compensation for the transportation of mail sufficient to insure the performance of such service, and, together with all other revenue of the air carrier, to enable such air carrier under honest, economical, and efficient management, to maintain and continue the development of air transportation to the extent and of the character and quality required for the commerce of the United States, the Postal Service, and the national defense."

²¹⁹ Huntington, "The Marasmus of the I.C.C.: The Commission, the Railroads, and the

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Public Interest," 61 *Yale Law Journal* 467 (1952). For a reply to this article see Morgan, "A Critique of 'the Marasmus of the ICC,'" 62 *Yale Law Journal* 171 (1953).

²²⁰ 53 ICC Annual Report 24 (1939).

²²¹ Criticism of the commission for failure to permit energetic railroad management a freer hand has recently come also from airline officers. (*Railway Age*, July 13, 1953, p. 80.)

²²² "The clear consensus is that Federal aid to other carriers works an injustice on the railroads. The remedies suggested are numerous, but all involve assessment of 'user charges' for the self-liquidation of Federal funds invested in highway, waterway, airway, and airport facilities." House Report No. 2735, 79th Congress, 2nd session (1946), p. XI.

²²³ A recent step in the right direction is President Eisenhower's Reorganization Plan No. 10, calling for a separation of airline subsidies from payments for the transportation of air mail.

²²⁴ 60 Stat 724 (1946), 26 USC § 1520 (1946).

²²⁵ 64 Stat 524 (1950), 26 USC § 1410 (Supp 1952).

²²⁶ Dearing & Owen, *National Transportation Policy*, 377 (1949).

²²⁷ *E.g.*, Baltimore & Ohio R. Co. v. United States (1953) 73 S Ct 592, 99 PUR NS 446; see Case Note 101 *University of Pennsylvania Law Review* 1228 (1953).

²²⁸ Arpaia, "The Attitude of the Several Forms of Transportation Toward Regulation," 20 *ICC Practitioners Journal*, 853, 859 (June, 1953).

²²⁹ Cf. A. L. Lowell, *What a University President Has Learned*, 146-147 (1938).

²³⁰ Roscoe Pound, *Inherent and Acquired Difficulties in the Administration of Punitive Justice*, 4 *Proceedings American Political Science Association*, 222, 233 (1907).

²³¹ John Dickinson, *Administrative Justice and the Supremacy of Law* (1927) 14, 15.

The Rate Base Is Here to Stay!

By FRANCIS X. WELCH*

I AM honored to have this opportunity to discuss, before this group of eminent legal specialists, a subject which is so fundamental to the law of public utility regulation—the rate base and its related factors of return and depreciation. At the same time, it is something of a challenge to go over such a well-harrowed field—one which has been covered so often through the years by top experts—and try to bring forth at this late date something new or valuable by way of conclusion or future outlook.

Yet I believe there is something more to be gained, at this particular time—than the sterile polishing of historical bones—in going back for another examination of those well-known foundation blocks on which the structure of our modern law of utility regulation has been erected, case by case, and statute by statute. I say so at this particular time, because we are now meeting in this historic city of Boston to celebrate the seventy-fifth anniversary of the founding of our great American Bar Association. And it so happens, by strange coinci-

dence, that just about three-quarters of a century ago—give or take a single year—three events happened of utmost importance in the field of public utility regulation.

FIRST, the telephone industry was born; second, the electric light was born; and third, constitutional regulation of public utility rates in the United States was born. The first successful public demonstrations of the telephone by its inventor, Dr. Alexander Graham Bell, were made in 1877. Next year, 1877, the electric utility industry will celebrate the diamond jubilee of Thomas Edison's electric light. And, as you know, it was in 1877 that the U. S. Supreme Court placed the seal of constitutional approval on a statute fixing public utility rates in that basic landmark decision, *Munn v. Illinois*.¹

Of course, the concept of utility regulation is much older. Chief Justice Waite in that very same decision traced it back to Lord Chief Justice Hale over three centuries ago. But for purposes of legal American history in utility rate making,

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¹ Decided January 29, 1877, 94 US 113, 24 L ed 77.

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the Munn Case was undoubtedly our starting point.

UNFORTUNATELY, the question of a rate base was not discussed in the Munn Case for the simple reason that it was not before the court. The only issue that was before the court was the bare constitutional question of whether the state of Illinois could, by statute, validly single out a certain class of business (in that case it was grain elevators) and fix or limit the price to be charged to the public for its services or products.

I say this was unfortunate because if the court had gone into a consideration of the basis for rate fixing in the Munn Case, it might have saved some of our latter-day Justices, on the same highest court, a lot of unnecessary and fine-haired distinctions between rate fixing as a police power of the state and rate fixing on the basis of the so-called eminent domain theory. That is a distinction which three Justices (and mark you well I say *three Justices*) labored so much in the concurring opinion of Justices Black, Douglas, and Murphy in the Natural Gas Pipeline Case, decided in 1942.²

You may recall that the three Justices were so determined to "lay the ghost of *Smyth v. Ames*"³ (I quote that phrase from the opinion) with its rule of fair value, decided in 1898, that they disagreed with the majority opinion by Chief Justice Stone, which restated the power of the highest court to invalidate confiscatory rate orders. The three Justices insisted that legislative price fixing, as upheld in the Munn Case, is not prohibited by the due process clause. From this it was inferred that such rates are not subject to judicial review or correction from the standpoint of alleged confiscation.

Now that was a pretty strong doctrine and you may recall that it moved Justice Frankfurter to write a second concurring opinion in the Pipeline Case. Frank-

² *Federal Power Commission v. Natural Gas Pipeline Co.* (1942) 315 US 575, 42 PUR NS 129.

³ *Smyth v. Ames*, decided March 7, 1898, 169 US 466, 42 L ed 819.

further was certainly never an admirer of the fair value rule in *Smyth v. Ames*. Yet he felt compelled to point out that the Black-Douglas-Murphy opinion, while denying the authority of the court to review the reasonableness of the FPC rate order in that case, was still trying to tell the FPC what to do about ignoring the fair value rule. In other words, they were trying to eat their cake of judicial rate supremacy and have it too, in the form of judicial monitoring on the use of rate formulae.

ANOTHER thing Frankfurter pointed out, which is commonly ignored by writers on the subject, is that the doctrine that state rate fixing must not be confiscatory by judicial standards of due process was not an original doctrine proclaimed by *Smyth v. Ames* in 1898. It was first established by the same Chief Justice Waite, who wrote the majority opinion in the Munn Case in 1877. Nine years later, again writing the majority opinion of the court in the Railroad Commission Case,⁴ the Chief Justice said:⁵

Under pretense of regulating fares and freights, the state cannot require a railroad corporation to carry persons or property without reward; neither can it do that which in law amounts to a taking of private property for public use without just compensation, or without due process of law.

It was on the basis of that opinion by Chief Justice Waite in 1886, that the court four years later, in the Milwaukee Railroad Case,⁶ laid down the doctrine which virtually postulated the fixing of reasonable or justifiable rates and therefore the use of a rate base.

Thus, the rate base concept was twice founded in case law, years before it was spelled out in such detail by the *Smyth* Case in 1898. For, after all, a rate base

⁴ *Stone v. Farmers' Loan & Trust Co.*, decided January 4, 1886, 116 US 307, 29 L ed 636.

⁵ 116 US 331.

⁶ *Chicago, M. & St. P. R. Co. v. Minnesota ex rel. R. & Warehouse Commission* (1890) 134 US 418, 458, 33 L ed 970, 982.

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any kind of a rate base—is simply a foundation upon which to erect a standard for measuring either the reasonableness of rates or whether they might be confiscatory. (I shall not here go into the distinction between the reasonableness and confiscation, which I am sure is familiar to all of you.) And in order to make that measurement intelligent, of course, you must also measure the reasonableness of the return and the reasonableness of the deductions and allowances for depreciation. In other words, as soon as you use the words "reasonable rates" (and nearly all of our Federal and state laws do use those words) you have postulated the need for a rate base upon which to measure "reasonableness." More than that, you have postulated the need of some final judgment as to the ultimate reasonableness, which amounts to a reservation of judicial review.

Of course, it is quite permissible for a statute to go beyond such a general standard and spell out, in terms of formula, or other conditions, just what shall constitute "reasonable rates." The Ohio legislature did that when it wrote a mandatory requirement for the use of reproduction cost value into the law, and the highest court of that state felt bound to follow it.⁷

All the Smyth Case did in 1898 was to lay down a rule of reason for use in determining fair value in terms of nonconfiscatory rate fixing. True, it went into considerable detail in setting forth factors to be considered—I will not take your time to enumerate them. But the court certainly did not attempt to dictate any set formula in the Smyth Case. On the contrary, the court plainly indicated that any combination of these standards, or even a single one of them, if the circumstances of the particular case warranted, might be used to test the claim of confiscation under the Fourteenth Amendment.

A number of legal writers have somehow reached the firm conclusion that the

fair value rule in *Smyth v. Ames* was overruled in practical effect, if not by formal expression of the U. S. Supreme Court majority in the *Hope Natural Gas Company Case*.⁸ I have never been able to join that view for the simple reason that what the U. S. Supreme Court majority actually did, in both the Pipeline and *Hope* cases (as distinguished from the dicta about the Fourteenth Amendment), could really be reconciled with the fair value rule laid down in the *Smyth* Case. I think this viewpoint was very well stated by the Vermont Supreme Court in the *New England Telephone & Telegraph Company Case* in 1949.⁹

After all, both the *Hope* and Pipeline decisions involved appeals from rate-fixing orders of the FPC under the Natural Gas Act. Under this act appeals may be taken to the U. S. Circuit courts as a matter of right on the issue of "reasonableness" of the rates fixed, rather than on the narrower test of confiscation which would be applicable to rates fixed by a state commission. I will presently touch on what a considerable number of the highest state courts have to say about the scrapping of the "fair value" rule as applied to state commission rate orders. But first I would like to comment on the questions raised by the so-called "end result" test laid down in the *Hope* Case, even as it applies to rates fixed by Federal regulatory commissions under the statutory requirement that they must be just and reasonable.

⁷ *Marietta v. Public Utilities Commission* (1947) 148 Ohio St 173, 71 PUR NS 186.

⁸ Decided 1944, 320 US 591, 51 PUR NS 193. Compare "Utility Regulation in the Light of the *Hope Natural Gas Case*," R. J. Hale, 44 *Columbia Law Review* 488; "The Demise of Fair Value," R. W. Harkeson, 42 *Michigan Law Review* 1049; "Smyth v. Ames in the State Courts, 1942-1952," Philip Mendelson, 29 *Minnesota Law Review*, and others. Another common assumption found in regulatory articles is that utilities and their rate critics have exchanged position several times on the subject of using reproduction cost as a rate base element. Except for the unusual circumstance in the *Smyth* Case, I can find no considerable body of utility industry opinion expressing any preference at any time for rigid adherence to a strict original cost basis for rate fixing.

⁹ 115 Vt 494, 79 PUR NS 508.

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The questions, stated bluntly, are simply these: Is any rate base necessary? Has the U. S. Supreme Court in the Hope Case—and later decisions along the same line—given the Federal commissions such discretion as to permit them to dispense with even the formality of explaining methods used, as long as the final product squares with the very general "end result" language in the Hope majority opinion, about allowing a utility enough return to continue to attract capital and so forth?

If that is what the majority of the court held (and I do not believe such is the case), then the rate base is obsolete. And any judicial review is a needless mockery because the so-called expert judgment of the commission becomes conclusive upon the court. How the courts, under such a concept, could obtain enough information about the rates under review even to apply the limited test of the "end result" becomes a mystery. And if the rate base is unnecessary for Federal commission rate making, *a fortiori* it becomes unnecessary for state commission rate making as far as the Federal courts are concerned under the Fourteenth Amendment.

I am sorry, in a way, that no appeal could be taken to the U. S. Supreme Court for the Wisconsin Supreme Court decision in that very interesting City of Two Rivers telephone rate case.¹⁰ For in that case, you may recall the Wisconsin commission tried to carry out this idea of refusing to reveal, even to the state appellate courts, what was the rational basis of its rate order or whether it even had any rational basis. In other words, it did away with the rate base entirely, and said to the court, in effect, "these rates are reasonable because we say they are reasonable and you will have to take our word for it because we are experts." The Wisconsin courts struck down this bold attempt to defeat judicial review.

¹⁰ Commonwealth Teleph. Co. v. Public Service Commission (1948) 73 PUR NS 97, 252 Wis 481.

Just by way of reducing this idea of conclusive expert judgment to absurdity, let us take a somewhat facetious hypothetical example. Let us suppose that the FPC put several alternative computations of the basis on which it proposed to compute a reasonable return into an ordinary hat. Next, let us suppose that a nice little 3-year-old girl, blindfolded, were asked to pick one of these numbers out of the hat. And let us suppose that the FPC thereafter found, as experts, that the "end result" of rates fixed on the rate basis selected by the little girl was just and reasonable. Can anyone seriously contend that the Federal courts would stand by and give such an arbitrary and capricious method the benefit of any presumption of reasonableness, no matter what the "end result" might be?

After all, it is very well for a body of presumed experts to say "we have used a reasonable basis" or "we have found a reasonable" return. But "expertise" (to use the word given us by Justice Frankfurter in the Hope Case) is, as "expertise" does. And as Justice Jackson said, in his opinion in the same case, "If we are to hold that a given rate is reasonable just because the commission has said it was reasonable, review becomes a costly, time-consuming pageant of no practical value to anyone." This same view was taken in a recent decision of the Eighth U. S. Circuit Court of Appeals, handed down on July 20, 1953, in setting aside a 5½ per cent return used by the FPC, on a comparative cost of capital basis, in fixing rates for the Northern Natural Gas Company. In that unanimous decision, Circuit Judge Woodrough, speaking for the court, said: "What is of importance is that we are unable from the reported findings to arrive at a reasoned conclusion that the 5½ per cent rate of return allowed by the commission is 'just and reasonable.' The commission has not sufficiently explained why it considers that rate reasonable . . ."

Then the circuit court went on to point out that virtually all the evidence

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in the record pointed to a 6 per cent return rather than 5½ per cent, and the case was remanded to the FPC with more than a strong hint to do something about the inadequacy of the 5½ per cent return and to use some other basis in addition to comparative cost of capital.¹¹ While this Northern Natural Gas Case is still pending, I understand the FPC has since allowed a 6½ per cent return in another gas rate case, so it may be that we will soon see this decision bearing fruit in the form of a future FPC regulatory policy.

BUT let us get back to the "ghost of *Smyth v. Ames*" and what has happened to the "fair value" rule in the state courts since the Hope Case. I have made an examination of key "post-Hope" decisions from twenty-one highest state courts. I will give you, briefly, the results by states. Out of twenty-one decisions examined, I have found acceptance of the end result dicta in the Hope Case in only four states, to date: Oklahoma, New Hampshire, New Mexico, and Utah.¹²

In 17 out of 21 state court cases, we have three different classifications of decisions, but all rejecting—in varying degree—the "end result" test in the Hope Case.

In the first group we find continued adherence to the fair value rule in *Smyth v. Ames*. This group of decisions includes cases from Illinois, Maine, Maryland, Minnesota, New Jersey, North Dakota, Ohio, Pennsylvania, South Dakota, Vermont, and Wash-

¹¹ *Re Northern Nat. Gas Co. (FPC 1952)* 95 PUR NS 289.

¹² These state decisions are cited as follows: *Southwestern Bell Teleph. Co. v. State* (1951) 204 Okla 225, 89 PUR NS 311; *New England Teleph. & Teleg. Co. v. State* (1949) 95 NH 353, 78 PUR NS 67; *State v. Mountain States Teleph. & Teleg. Co.* (1950) 54 NM 315, 88 PUR NS 388; *Utah Power & Light Co. v. Public Service Commission* (1944) 107 Utah 155, 56 PUR NS 136. In the New Hampshire Case, the court stated that the finding of a rate base is required by state law, but that it need not involve fair value, reproduction cost, or any other single formula.

ton.¹³ In the second group we have four state courts insisting that the commission use a reasonable rate base but not necessarily postulating a fair value rule: Arkansas, Georgia, Massachusetts, and Wisconsin.¹⁴ In the third group are two state court decisions which reject the "end result" test in the Hope Case, but which uphold their state commission rate orders in such a way as to make them, at least, reconcilable in a broad way with the alternative standards of fair value laid down in the *Smyth* Case. These are cases from Alabama and Idaho.¹⁵

And this lopsided box score of 17 out of 21 state court decisions, which refused to accept the "end result" test, does not tell the whole story. I could name a half-dozen other states where the commissions themselves are following the fair value rule so that there was no need of court appeals to correct commission in-

¹³ *Illinois Bell Teleph. Co. v. Commerce Commission* (Ill Sup Ct 1953) 98 PUR NS 379, 111 NE2d 329; *New England Teleph. & Teleg. Co. v. Public Utilities Commission* (Me Sup Jud Ct 1953) 98 PUR NS 326, 94 A2d 801; *Chesapeake & P. Teleph. Co. v. Public Service Commission* (Md Ct App 1952) 97 PUR NS 50, 93 A2d 249; *Re Minneapolis Street R. Co.* (1949) 228 Minn 435, 79 PUR NS 407; *Re New Jersey Power & Light Co.* (NJ Sup Ct 1952) 95 PUR NS 467, 89 A2d 26; *Northern States Power Co. v. Public Service Commission* (1944) 73 ND 211, 53 PUR NS 143; *Marietta v. Public Utilities Commission* (1947) 148 Ohio St 173, 71 PUR NS 186; *Pittsburgh v. Public Utility Commission* (Pa Super Ct 1951) 88 PUR NS 70; *Equitable Gas Co. v. Pennsylvania Public Utility Commission* (1947) 160 Pa Super Ct 458, 68 PUR NS 65; *Re Northwestern Bell Teleph. Co.* (SD Sup Ct 1950) 85 PUR NS 368, 43 NW2d 553; *Re New England Teleph. & Teleg. Co.* (1949) 115 Vt 494, 79 PUR NS 508; *State v. Pacific Teleph. & Teleg. Co.* (1947) 27 Wash 2d 893, 70 PUR NS 250.

¹⁴ *Fort Smith v. Southwestern Bell Teleph. Co.* (Ark Sup Ct 1952) 94 PUR NS 214, 247 SW2d 474; *Public Service Commission v. Atlanta Gas Light Co.* (1949) 205 Ga 863, 82 PUR NS 321; *Lowell Gas Co. v. Department of Public Utilities* (1949) 324 Mass 80, 78 PUR NS 506; *Commonwealth Teleph. Co. v. Public Service Commission* (1948) 252 Wis 481, 73 PUR NS 97.

¹⁵ *Birmingham Electric Co. v. Public Service Commission* (Ala Sup Ct 1950) 254 Ala 119, 47 So2d 455; *Re Pacific Teleph. & Teleg. Co.* (1951) 71 Idaho 476, 92 PUR NS 229.

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terpretations: Colorado, Kansas, Montana, Nebraska, South Carolina, and Virginia. Of course, in many of these states the fair value rule is written right into the regulatory statute. But I think this analysis does show that the "end result" test is by no means accepted by the states, and that the great weight of authority is looking in the opposite direction.

FINALLY, what lesson of future value can we get from this analysis of case law? I might state it in two sentences. The rate base is here to stay. And the state courts have refused to close the door on judicial review as to the reasonableness of commission rate making. Another time I had the honor of addressing this Section of Public Utility Law was at the Cleveland convention in 1947. At that time I had occasion to recall that regulation over the years had gone through three distinct phases of evolution. First, the legislative rate-making period ushered in by the Munn Case; second, the judicial review period ushered in by *Smyth v. Ames*; and, third, the emphasis on expert commission decision underlined by the Hope Case. Thus all three constitutional branches of our form of government have taken turns in shaping regulatory policy. I expressed some wonder at that time which branch would remain permanently in the dominant position. From the events that followed since that time, I would now say that the present outlook indicates that the courts are not going to give up their final say as to reasonableness and due process no matter how expert our commissions may claim to be. And, on the whole, that strikes me as the safest course to follow, for regulation generally.

We do not know what the future has in store in the way of continued inflation or price fluctuations. It is quite conceivable that a formula that would be valid and desirable in one period would be undesirable and unworkable in another. Just the other day I read of a Georgia commission decision in which the commission used as a rate base invested capital instead of the investment

in plant and equipment.¹⁶ The commission gave as its reason the fact that an invested capital base eliminates the troublesome question of construction work in progress which would have to be decided if plant investment were used as a base. Now, in theory, that is exactly what the court found wrong with the railroad company's argument in *Smyth v. Ames*. But it is conceivable that back in 1898, before regulation of security issues could get the water out of the utility stocks, there were sound objections to invested capital as a rate base, which would not be sound or valid at this late date.

Again, it is conceivable that a continued inflation would make a strict original cost base for rate making entirely unworkable. At our convention in San Francisco last year, one of the speakers referred to the experience of a telephone company in Shanghai, China, operating under such monetary inflated conditions that the original cost of the entire utility plant would not buy a single telephone instrument. Who can say then, in the coming years in this country, the dollar will not fall in purchasing power to such an extent as to make the use of an original cost rate base not only unjust and unworkable but positively ridiculous! It is no answer to say that prices go down as well as up. In the last sixty years the purchasing power of the dollar has dropped to less than a third, and in only about a half-dozen years has it gone up instead of down. This means that over any long-range period the use of a strictly original cost rate base is simply a device for shortchanging the original cost investors.

THE point I am making is the point which, it seems to me, the U. S. Supreme Court made in *Smyth v. Ames*: That no one formula or consideration should be the exclusive test. All of these formulas are instruments which might be valuable and workable under changing conditions. As practitioners and stu-

¹⁶ *Re Georgia Power & Light Co.* File No. 19313, Docket No. 470-U, decided May 11, 1953.

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dents of regulation, it seems to me to be important that we should keep these instruments in working order, against the time when they may be needed. Fortunately the courts have not forbidden this choice of instrument, although we have come very near to that in some of the closely divided decisions. And because the door *has* been left open, it is not necessary for us to go to Congress at some future date with the difficult task of rewriting regulatory laws in order to get around some restrictive decisions, as is the case with some other phases of regulation; notably, FPC jurisdictional questions under the Natural Gas Act.

It is a tribute to the wisdom of our system of checks and balances that the courts continue to resist pressure of passing passion and prejudice, which might result in unwise restrictions over the long range. In short, as I see it the "ghost of *Smyth v. Ames*" is still doing business at the same old stand. It may not be doing as much business as it used

to do under the Fourteenth Amendment, but the courts, as a whole, are still keeping the door open to those who need protection from any real abuse by administrative experts. Who can say but that with changing times, continued inflation, and turnover in membership, even some experts on our Federal commissions may not change their minds about the wisdom of the fair value rule?

THE Federal Power Commission had two new members appointed during the past year and another's term is expiring next June. Who can say that—with continued inflation—FPC may not some day decide that it will have to go back to fair value rule? When and if it does, the door is still open under the majority decisions of the highest court. And those who think that the "ghost of *Smyth v. Ames*" has been permanently laid are, in my humble opinion, indulging in "pipeline dreams" of wishful thinking, or should I say "expressions of hope"?

Significant Trends As to Rate Base Depreciation, And Rate of Return

By STUART F. KOSTERS*

As the engineer representative of the panel, I shall limit myself to an engineering discussion of the topics and try to avoid any temptation to indulge in legal interpretations of court or commission decisions. I have taken that liberty at times in years gone by, only to be firmly but surely admonished by friendly counsel with a reminder to stay on my own side of the fence.

Before beginning a discussion of the three individual subjects, it may be appropriate to discuss, briefly, a relatively recent innovation in utility regulation, which, when practiced, appears to treat all of our subjects collectively, or it might be that it bypasses them all. I refer, as you probably surmise, to the

"end result" principle which was announced, *not* for the first time, by the U. S. Supreme Court in the *Hope Natural Gas Company* decision.¹ I say "not for the first time" because as far back as 1924, nearly thirty years ago, a Wisconsin Supreme Court fostered the same idea in a decision involving fair rates for the Wisconsin-Minnesota Light & Power Company.² In its opinion, reviewing the commission's decision, the court said:

It is not its method that is to be reviewed, but the result reached by the commission. The statute charges the commission with the duty of ascertain-

¹ *Federal Power Commission v. Hope Nat. Gas Co.* (1944) 320 US 591, 51 PUR NS 193.

² *Wisconsin-Minnesota Light & P. Co. v. Railroad Commission*, 183 Wis 96, PUR-1924C 534, 537.

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ing and declaring a reasonable rate. If this is done, the method by which the commission arrives at the result is not subject to criticism.

I wouldn't be surprised if the late Adolph Hitler got some bright ideas from that language. By what possible standard can a rate be judged reasonable unless the method employed in reaching the result is shown to be proper and reasonable?

As I understand the "end result" formula, if it may be classed as a formula, it simply means that the test of fair rates is ability to meet the following requirements:

1. Pay operating expenses.
2. Allow for adequate depreciation accruals.
3. Pay interest on outstanding debt.
4. Allow a reasonable margin for equity investors.
5. Be sufficient to attract additional capital.

All well and good, I agree in principle, but what about the practical aspects of the case?

Only two of the five requirements enumerated—namely, the amounts needed to pay operating expenses and debt interest—are matters susceptible of factual and ready determination. The other three requirements depend on special considerations peculiar to the particular situation under investigation. In each case we are confronted with the question of what is reasonable, what is fair, or what is proper and adequate. These questions suggest the need for a test in each instance. I do not believe that we have yet reached the point where one man or one body is able to decide, without testing the component elements, that the final result is reasonable, fair, and proper. If we ever reach that point, we lawyers, economists, and engineers had better find interests in life outside the field of regulation. Certainly there will be no need for our assistance in solving problems associated with fair rates.

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The end result approach, as I have seen it employed, just doesn't stand up. When adopted by regulatory authority, as the Supreme Court did in the Hope Case, conclusions stand unsupported by test. Without the aid of certain conventional determinations, I submit that the approach cannot be logically accepted. The language of Mr. Justice Jackson in his dissenting opinion in the Hope Case⁸ brings out clearly the lack of security or soundness in the opinion of the majority. He said in his minority report, and I quote:

We need not be slaves to a formula but unless we can point out a rational way of reaching conclusions they can only be accepted as resting on intuition or predilection.

And later:

The court sustains this order as reasonable, but what makes it so or what could possibly make it otherwise, I cannot learn.

(Predilection is a harsh word in this quotation—its use might indicate that Mr. Justice Jackson knew something that he didn't say.)

I LIKED the minority opinion, particularly because I believe it was the instrument which prevented a stampede toward acceptance of the principle announced in the majority opinion. Although the end result principle has been weakly reflected in some decisions since the Hope Case, by and large, I believe it has failed to catch on. In fact, as I read the cases, it has been ignored in most opinions and even mildly condemned in others. Only one *state* commission decision has come to my attention which seems to have been in reasonable harmony with the court's theory. That was the case of Southern New England Telephone Company, where the Connecticut commission at Docket No. 8458 in 1951 said:

It is not necessary for a commission

⁸ 51 PUR NS 193 at p. 225.

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to test the reasonableness of a given schedule of rates against any specific rate base, provided that the "end result" is reached by consideration and use of sound standards and that this consideration is disclosed in the commission's findings.

EVEN in this opinion, the commission recognized the necessity for supporting an opinion. Later it almost threw the theory overboard when it added:

The decision in the Hope Natural Gas Company Case does not eliminate the need for disclosing the method employed to reach rates approved by a commission so that its validity will be clear and may be tested if subject to judicial review.

Of course, the Federal Power Commission, basking in the sunshine of the Hope decision, has made much use of this procedure when it was expedient to do so.

As to cases outside the jurisdiction of the Federal Power Commission, the theory has been vetoed in a number of instances. A circuit court in Indiana in the case of Indiana Bell Teleph. Co. *v.* Public Service Commission, said in 1952.⁴

Valuation is required in a proceeding before the state commission to fix rates. . . .

and in 1951, the New Jersey commission at Docket No. 5093⁵ said:

The determination of an adequate rate base is . . . fundamental in any rate proceeding.

The California commission recognized the necessity of rate base consideration in a decision in 1951 on the application of Pacific Gas and Electric Company.⁶ In fact as I read the decisions, except for the purpose of interim orders, this commission always tests allowable income by

application of a rate of return to its determination of a rate base.

In New Hampshire the state supreme court in 1949 clearly ruled on the necessity for finding a rate base. In its New England Telephone & Telegraph Company decision the court said:⁷

A definite finding of the base upon which a company is entitled to a return is required by state law.

Based on a more or less general coverage of other recent cases touching on this subject, I am confident that the end result theory is not particularly popular even with the *regulators*. It surely is not to be adjudged the law of the land or accepted as proper basis for determining fair rates. No, we still have with us the more conventional approach of determining fair return by the application of an appropriate rate of return to a reasonable rate base.

THAT's all for the preliminaries. I come now to the main event—a consideration of the three individual subjects which were assigned for this panel discussion. The first for consideration, of course, is that very important and I might add very often abused factor, the rate base.

If I had to answer in brief fashion the blunt question of "What is the trend as to rate base?" I would not hesitate to answer quickly that I see signs of the worm turning and I believe we are headed away from that school of thought which contends that original cost or prudent investment or some degree of one of these monsters is value or an acceptable substitute for it. It appears so clear as to be self-evident that this nominal dollar approach to rate base is improper if all interested parties are to receive fair and equitable treatment. Certainly during periods of inflation, such as we have had with us for some time, the early equity investor is bound to suffer loss, and only by the process of monetary deflation could he hope to

⁴ 93 PUR NS 480, headnote 4.

⁵ *Re* Vineland.

⁶ 98 PUR NS 405.

⁷ 95 NH 353, 78 PUR NS 67, headnote 3.

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recoup his losses. However, the more recent investor of inflated dollars enjoys a windfall during a deflation period. Now as a practical matter, if deflation became a reality to any appreciable degree, we all know that the consumer would not relish the burden of high payments and soon the nominal dollar theory would go the way of all flesh—a substitute would have to be found in the interest of popular appeal. The nominal dollar theory is definitely a one-way street. I submit it cannot possibly work unless we are to enjoy a stable currency, which, of course, is not in accord with the economic facts of life.

I do not intend to suggest that the trend away from the original cost concept is already well defined; it is far from that. Certainly the Federal Power Commission has not given any ground and the same can be said for many state commissions. Remember, we have a long and difficult road back. The "cost" advocates have gone to great length to entrench their gospel. As recently as 1945 a statute was enacted in North Dakota which, in clear language, provides that "the value of the property of a public utility as determined by the public service commission for rate-making purposes shall be the money honestly and prudently invested therein." Also, in North Carolina, bills were introduced this year which would establish the base used in determining public utility rates as original cost less allowance for depreciation and obsolescence as opposed to the present procedure which embodies acceptance of reproduction cost.

Again, as late as this year of 1953, the Maine legislature passed a law which permits the commission to consider original cost, current value, depreciation, and other factors connected with the utility's property. This bill would nullify a requirement in the present law that fair value must be considered when fixing a rate base. It is difficult for me to understand how the mere procedure of a state legislature

enacting a law can possibly change a factual finding of cost or investment into value, something which is entirely disassociated with either of them. Original cost or investment can generally be found of record and either or both relate to past expenditures, whereas value must necessarily be predicated on an estimate of worth as measured in a current competitive market. I confess to an abundance of legal ignorance, but from the standpoint of plain practical economics, I incline to the belief that a law such as was enacted in North Dakota just doesn't make sense.

You are all familiar, I am sure, with the history of the cost concept. Excepting as related to railroads, it was born about the year 1937 under the guise of an accounting reformation and was nurtured through the early days of its growth by those who had other uses in mind for it. It was first given life, nationally, in the telephone industry; shortly thereafter it was thrust upon the electric utilities; and following close on that it was prescribed for the gas companies. Of course, in so far as rates were concerned, it was of little importance to the railroads in the early days, because they were unable to earn a decent return on any kind of a base.

It didn't take very long to inject the new concept fairly generally into rate regulatory circles. It was first popularized on the premise that it was so easy to find a rate base by mere reference to the balance sheet of a company. Of course, some things on the balance sheet were considered not exactly proper but these could be readily deleted from the plant account before the true and pure value was determined. The idea proved tremendously popular in so far as the regulators were concerned where statutes permitted. Why not? It made for lower rates which have always been popular with the public and after all the public is an important group in the lives of many administrative officials.

THE "cost base" parade was on. Small companies which were not

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strong enough to fight the onslaught of this creeping paralysis, struggled along as the wave passed over them. Larger companies, even the big ones which had shown a disposition to resist the movement in the early days, soon fell in behind the band wagon because, in many instances, they considered it the expedient course to follow. It was murder in my humble opinion and, if asked off the record, I could name some of the organizations and individuals who planned and carried on the slaughter.

Regardless of my objections and those of others, it continued to gain impetus and things went from bad to worse until by the year 1948 the cost concept had about reached its peak of popularity. In that year the Federal Power Commission, always a leader in regulatory "reforms," and equally quick to tell the public about it, published a little booklet entitled "State Commission Jurisdiction and Regulation of Electric and Gas Utilities." This booklet, among other things, summarized the methods of state commission rate base determinations for electric and gas utilities.

At that time 44 states and territories had regulatory commissions with jurisdiction over either or both electric and gas utilities. Of these 44 which were canvassed, only 35 responded to an inquiry as to their rate base practices. Of the 35 responders, there were 11 that said they had adopted the prudent investment rate base principle, eight said they used original cost, one said historical cost, one said original cost with a nominal allowance for reproductive value, six reported a consideration of all elements, and six said they regulated on the fair value concept. In addition, the state of Ohio reported that reproduction cost was prescribed by statute and Maryland said it used fair value determined as of 1923, with net additions to date of inquiry.

Now, how has that over-all picture changed in the last five years? Admittedly there are not a great many shining examples of a positive change of

attitude on the part of regulation. Nevertheless, there is an undercurrent which is softly rumbling with good omens. I can't put my finger right on the basis for this confidence, but I am reasonably sure that a change for the better is at least in the making. In private conferences I have been impressed with a new attitude of several commissions. Companies no longer are being advised against applying for rate increases. If they have a logical story to tell, in justification of a rate increase, they are invited to tell it. One item in which most commissions have displayed little or no interest in the past is the trend in construction costs. Now, since the trend has reached such definite heights with no signs of prospective retreat, some commissions are taking note of the fact. Generally, if they have been strong original cost advocates, they are not disposed to establish precedent, in a given situation, by spelling out acceptance of the fair value principle.

However, we have found instances where testimony designed to show the decided increase in construction costs, or, conversely, the decrease in the value of the dollar, has been listened to with real interest and has received consideration in one way or another in the final fixation of rates. Possibly a desire to save face has influenced some commissions and prevented an announcement of a change of policy.

THE movement away from simon-pure original cost is certainly gaining strength within the utility industry itself. Whereas, for many years there has been an era of complacency on the part of most companies, simply because it was possible to survive under original cost regulation, we find that in practically all recent cases the companies are making a decided effort to prove in the necessity for a rate base, higher than one based on original cost or its counterpart. There is little doubt, generally, that necessity for a higher base already exists or is just around the corner, since it is becoming more and more apparent that

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earnings in the utility field soon must improve if the operators are going to be able to satisfy a continuous and continuing demand for expansion capital. I was much impressed by an article written by the late Honorable Harold A. Scragg, formerly chairman of the Pennsylvania Public Utility Commission, which appeared in the PUBLIC UTILITIES FORTNIGHTLY about a year ago.⁸ Two short quotations from this article will probably bear reciting:

Inflation and its effects are now as much a part of every rate case as the case itself and must be recognized by any regulatory commission in determining questions of value.

And later:

Any business whose capital is shrinking in terms of relative purchasing power is failing to recover its total economic costs, including adequate return, and, in fact, is cannibalizing its own capital. The attraction of new capital in these circumstances becomes exceedingly difficult and only under unfavorable terms, which results, in the long run, in higher prices to consumers or poor service or both.

When the chairman of a very conservative commission, such as the Pennsylvania commission is and always has been, apparently sees the light and publicly proclaims it, I am encouraged and look forward with much more optimism than I have been able to muster during the very dark days of the past decade and a half.

IT may also be appropriate to call attention to an address by Judge John P. Randolph to the Pennsylvania Water Works Association delivered in the latter part of last year. You may recall that Judge Randolph was that outspoken general solicitor of NARUC until he recently resigned. In the address I refer to, he made two valuable suggestions

⁸ "A Restatement of Fundamentals of Utility Rate Making," Vol. L, No. 6, September 11, 1952, p. 347.

for adjusting the regulatory process to meet present inflationary trends. They were:

1. Speed up testimony in hearings so that it won't be out of date before the commission can render a decision, and
2. Use index numbers to adjust for inflation.

This latter suggestion, he said, "has attraction in that it expresses the investment in the same kind of dollars as is used to express the income and so relates *like* quantities to obtain the rate of return." I think that is important.

Let us pause a moment and contrast the constructive suggestions made by Judge Randolph with language used by a NARUC committee reporting, to the last (1952) convention, on progress in regulation. The report reads, in part, as follows:

A rate base consisting of depreciated original cost or net investment plus working capital still receives exclusive or substantial weight in most final determinations.

Presumably this accomplishment is reviewed with pride. I see nothing in the result to be proud of and, further, it may be that committee reports before too long will carry an entirely different message.

REFERENCE has previously been made to concrete examples of a limited change in the attitude of some regulatory authorities. Let us review briefly some decisions which tend to point up that claim.

In 1948 the Arizona commission reported to the Federal Power Commission that it used the prudent investment theory in rate base determinations. However, in 1952, in the Central Arizona Light & Power Company Case,⁹ the commission found a proper rate base to be midway between net book and trended original cost less depreciation. Also, in the Arizona Edison Company Case

⁹ Docket No. 9958-E-1028, Decision No. 22271.

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decided in 1951,¹⁰ the commission granted the total increase requested by the company after finding a rate base which lay between net book and economic value presented by a witness for the company. Actually, the finding was closer to value than to the investment figure.

The Florida commission, in 1952, granted a rate increase to Southern Bell Telephone & Telegraph Company.¹¹ Included in the text of the decision was the following language: "... to cope with the highly inflationary economy now gripping the country."

The mechanics adopted by this commission involved application of a rate of return to a depreciated cost base with an additional allowance "to provide for the depressing effect of high construction costs on earnings." This certainly has the appearance of an indirect method of granting an allowance for the increase in construction costs or the complimentary decrease in the purchasing power of the dollar.

THE supreme court of Illinois, in reviewing an Illinois Bell Telephone Case just a few months ago,¹² rejected the commission's claim that "one of the important factors in fixing a rate base is the rate of return." The commission had adopted depreciated original cost for the rate base and apparently attempted to justify its use by suggesting that liberality in the rate of return allowance would compensate for the inadequacy of the rate base. The court failed to see the logic and said:

This statement at first blush has a deceptive quality of truth. Its best criticism is that it creates an inextricable circle, providing no beginning nor any basis for fixing a rate of return other than the nebulous formula "that when all things are considered the rate should be just and reasonable and provide a reasonable return on investment."

¹⁰ 90 PUR NS 140.

¹¹ 92 PUR NS 335.

¹² 98 PUR NS 379, 388.

The court further rejected the commission's claim that it should be permitted to use only the value of the investment without regard to present value of property.

The Indiana commission, which in 1948 had not reported its method of reaching a rate base determination, has quite consistently practiced the original cost theory. Last year a circuit court in Marion county reviewed an Indiana Bell Telephone Company Case, previously decided by the commission, and allowed the company \$6,000,000 more than the commission had prescribed because the commission had failed to recognize reproduction cost in calculating the rate base.

In a case involving rates for New England Telephone & Telegraph Company,¹³ the supreme court of Maine reversed the commission because it had ignored the statutory requirement of finding fair value. The court said the commission "had no right to take short cuts across the rights of others—even those engaged in a public utility service—to reach popular results."

PROBABLY one of the most important decisions has just recently come down from the Illinois Commerce Commission. This was in The Peoples Gas Light & Coke Company Case.¹⁴ Although less than a year ago in the Northern Illinois Water Corporation Case¹⁵ this commission had not only denied recognition of reproduction cost, but had severely condemned its use, nevertheless in the Peoples Case it found a fair value rate base, predicated on a consideration of current economic conditions, price levels, and replacement cost, as well as a consideration of original cost. Although the full decision was not available when this paper was prepared, it is understood that the allowed rate base was about halfway between reproduction cost and original cost. The decision certainly lines up with the state supreme court's opinion in

¹³ (1953) 98 PUR NS 326, 94 A2d 801.

¹⁴ 99 PUR NS 361.

¹⁵ 39448, March 27, 1952.

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the Illinois Bell Case and probably permanently removes the Illinois commission from that group which seeks to impose the original cost concept on the utility industry.

The next case to be cited is not clearly indicative of a switch to the fair value approach but it does appear to suggest tolerant thinking on the part of the New Jersey commission. In a case involving fair rates for Cranbury Water Company,¹⁶ the commission refused to fix a rate base solely on reproduction cost where the record failed to show that the company gave any consideration, in its *pro forma* income statement, to savings that might result from a redesign of the system. The position taken by the commission apparently resulted in penalizing the company for its failure to take proper account of obsolescence. If such was the fact, the point is well taken.

The last case to be cited is one which involved fair rates for Cambridge Electric Light Company, decided by the Massachusetts commission last year.¹⁷ This decision doesn't find the commission leaving its prudent investment position but it does indicate some thinking along these lines. The commission refused to apply a rate of return to a rate base computed on present-day dollars or trended to present-day costs; rather, it used book investment. The commission stated that "where the concept of original cost was evolved at so early a date, Massachusetts should *not* be among the *first* to abandon it without more cogent reasons than appeared in this case."

TURNING now to the next subject—namely, rate of return—I regret that I cannot bring to you as much optimism as I have displayed in respect to the rate base angle.

As a preface to any consideration of rate of return, it should be pointed out that even allowances which have been considered normal in the past can no longer be considered satisfactory for the reason that earnings, generally, are in

reality overstated these days as a result of inadequate depreciation charges. I refer, of course, to reserve deficiencies at retirement date, resulting from accruals being restricted to an original cost base.

In the face of the apparent necessity for a higher rate of return to meet inflationary conditions, and at about the time it appeared that commissions might do something about it, we suddenly find allowances headed in a downward direction.

The factor responsible for this situation has been much to the foreground of late—it is the adoption of a mongrel and inappropriate cost-of-money theory as a measure of fair rate of return. Cost of money is not related to the cost of labor and material and therefore it cannot possibly be expected to compensate for inflation. Money costs may go up or down, while prices are trending in the opposite direction.

Adoption of this cost-of-money theory in fixing rate of return has proved to be and may continue to be a potent weapon in forestalling rate increases, but, in my judgment, it is an unsound approach which tends to weaken the utility security market. Use of this yardstick fails to take into consideration the risks which are inherent in the business or the current need for large amounts of new money for expansion purposes. It ignores trends in business as well as prices.

A major fault to be found with this mongrel theory is the inconsistency in using present earnings-price ratios for common stocks with historical costs of outstanding debt issues. Plant expansions must come from new money raised in the future and certainly money costs are on the increase. Interest rates at present are surely very much higher than those which apply to presently outstanding securities.

THE low point in allowed rate of return for each class of utility, excepting water, came in either 1947 or 1948. The exception is readily explained due to the lack of cases. Actually, there was only one decision reported in a water

¹⁶ 94 PUR NS 275.

¹⁷ 96 PUR NS 77.

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case between 1938 and 1949 and since then there have been only nine cases reported.

In the case of the other utilities, the trend is definitely upward from 1948 through 1951. Electrics rose from an average of 5.36 per cent in 1947 to 5.89 in 1951. In 1952 the average dropped back to 5.8 per cent. For gas utilities, the low was 5.08 per cent in 1948, up to 6.41 in 1951, and back to 5.82 in 1952. Telephone companies had a low of 4.55 per cent in 1947, rose to 6.13 in 1951, and then dropped back to 6.03 in 1952. All utilities combined had an average of 5.36 in 1947, rose steadily to 6.16 in 1951, and dropped back to 5.95 in 1952. These figures are based on well over 200 decisions rendered in the period 1947 to 1952, the most active period for rate cases throughout the history of regulation. Although a complete analysis of the current year is not possible, there is sound support for the prediction that allowed returns are still on the toboggan. The recent trend downward can be traced generally to use of an illegitimate cost-of-money formula.

THE major source of my information on allowable rates of return is a very comprehensive analysis prepared by Arthur Andersen & Co. which covers all cases reported in PUR between the years 1915 and 1952. With the assistance of this analysis, I have come to the following summary conclusions:

1. In general, allowable rates of return have followed the trend of money rates and bond yields. These were very high in the twenties but began a decline in 1931.

2. The trend of allowed returns again turned upward about 1947 fairly well in parallel with the advance in bond yields.

3. Until recent years there was always a differential allowance in favor of gas utilities as opposed to electric. Now the reverse is true.

4. Rates of return allowed by regulation are becoming more generally geared to a cost-of-money theory

which fails to give proper effect to the economic situation in which the industry now finds itself.

5. Ability to attract new capital is an important consideration in fixing fair rate of return, but conjunctively it is also important to consider the rights of the old investor.

On this point I again take the liberty of quoting from the writings of a former chairman of the Pennsylvania commission — the late Honorable Harold A. Scragg.¹⁸ He said:

While one of the tests in determining the reasonableness of utility rates has been the ability of the business to attract capital, it must be borne in mind that such a test is not conclusive, for a step further must be taken in the analysis—the ability to raise capital must be examined in the light of whether it has been of such kind and on such terms that existing owners have been treated fairly and equitably. . . .

DEPRECIATION is the third and final subject for consideration. We are all familiar with the dilemma which confronts all types of industry today. Although it is definitely important to industry in general, it is particularly serious in the utility field because under present rules of regulation there appears to be no solution to the problem and possibly no avenue of escape from chaos. I refer to the necessity of bridging the gaps between capital recouped at the expiration of property life and the investment required to replace the retired property so that continuity of service to the public may be maintained.

Among the many things that fail to work in the utility field during periods of unstable prices, depreciation based on original cost without regard to replacement cost, appears to head the list. Away back in 1909 when regulation was in its infancy and the subject of depreciation was really getting its first serious con-

¹⁸ PUBLIC UTILITIES FORTNIGHTLY, Vol. L, No. 6, September 11, 1952, p. 347.

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sideration, a wise U. S. Supreme Court expounded on the subject in the Knoxville Water Case, as follows:

... the company is entitled to earn a sufficient sum annually to provide not only for current repairs but for making good the depreciation and replacing the parts of the property when they have come to the end of their life.

... It is not only the right of the company to make such provision, but it is its duty to its bond and stockholders, and in the case of a public service corporation at least, its plain duty to the public.

Although in this case the court was dealing with the propriety of providing or not providing any depreciation, the annunciated principle appears to be equally applicable to the question of the sufficiency of the provision.

WITH respect to this whole subject of insufficient depreciation accruals, about which so much has been written by so many informed and competent people, I would say that there is

no trend in the utility field, or, to put it in other terms—the trend is flat. Whenever the subject is raised in a rate case, it is immediately slapped down, unfortunately, to say the least, because it is vital to utilities. Clarence H. Ross, in speaking before this section at your meeting last year in San Francisco, clearly explained how much more important inadequate accruals are to regulated industry than they are to unregulated business. He pointed out that a utility cannot increase the price of its product, whereas this course is open to competitive business. Also, the high ratio of plant investment to operating revenues in the utilities makes them particularly vulnerable from the depreciation standpoint.

Considering trends from the standpoint of conventional depreciation practice in the utility industry, there are but three important factors to be reviewed. First, there is the accrual method employed; second, the annual rate applied to base figures; and, third, the size of the accrued balance in the reserve as related to the property account.

Recent Significant Trends in Public Utility Rate Determination

By D. F. HOULIHAN*

Introduction

IT is highly appropriate that some of the controversial factors of utility rate making be discussed from the viewpoint of the several professions whose special talents are required for the attainment of equitable results. This opportunity to learn the feelings of the other fellow should help us all to coordinate our thinking since we share a common objective: the attainment of a fair balance among consumer, management, and investor interests. Nothing is more in order than a co-ordinated approach at this time since we could be,

and I hope are, at a turning point in regulatory philosophy: the beginning of the end of a painful era of slavish adherence to the original cost accounting concept. Recent court decisions in Illinois, Maryland, and Maine and other events are indicative of a trend toward the re-introduction of the judgment factor in rate determination.

An informed investor does not buy stock in any company solely on the basis of its financial statements. There are many more factors than accounting involved in predicting the financial future of a utility company, and these, in large measure, represent major problems in rate making. Competitive sources of en-

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ergy, the ability of the enterprise to maintain its physical capacities, the difficulties of raising capital, the value of the dollar, and legal requirements in various state and Federal jurisdictions are among the many items which must be considered in addition to a utility's financial results for past periods.

ONE of the effects of the past tendency of many regulatory bodies to base rate decisions directly on accounting results obtained by so-called sound accounting principles developed and fostered by them, has been that the engineer, the economist, the banker, the lawyer, and the other professional people have begun to question the validity of such accounting principles, as well as those which do not take into consideration factors of economics, engineering, etc. The problem is not a new one; for instance, we all recall:

(1) the doctrine of original cost, which provided for the elimination of certain items included in the property account but, nevertheless, prohibited the inclusion of substantial amounts of property additions previously charged to operating expense on the grounds that the companies were irrevocably bound by their previous accounting practice. This doctrine was also applied to companies that were not subject to regulation when the recording of the transactions occurred,

(2) the treatment accorded to the excess of good costs prudently made in acquiring utility properties in excess of original cost which, in most instances, were required to be written off to surplus or amortized over a relatively short period by charges to income "below the line," and

(3) the retroactive application of so-called straight-line depreciation reserve deficiencies which, in many instances, were required to be charged to earned surplus or to capital surplus created by the reduction of the common capital stock account. In many instances, the uniform systems of accounts previously prescribed by the

regulatory commission had provided for "retirement reserve accounting" and the utilities had followed prescribed requirements.

All these represent rate determination battles which have been needlessly fought on the territory of the hapless utility accountant.

ACCOUNTING practices such as the three just mentioned which have not been generally accepted among accountants should not be a basis for regulation. The pattern of accounting theories sponsored by regulatory bodies as "mere accounting" and later used as a lever in rate proceedings to impose a social concept has become too familiar. These purposeful theories should never be confused with generally accepted accounting principles which have developed through widespread practice and experience and are sponsored by professional accounting organizations.

Accounting may be called a disciplined art based on certain conventions. One of these is the assumption that a dollar is a constant unit of measurement. The accountant, in an era of inflation such as we have experienced since the Second World War, is faced with the problem of how to recognize the fall in buying power of the dollar. (The problem is comparable to but even more complicated than that of the engineer with the shrinking yardstick.) Should it be left to subjective interpretation as in the case of the higher but less valuable pay envelope—or should financial statements be restated in some fashion to indicate currency units of equal buying power? With the latter course go the dangers that, for practical reasons, all companies cannot carry it out uniformly without government action and the result might be a mixture of accounting and economics too confusing for further interpretation or evaluation. However, there is no reason why the accounting solution to this problem must be found for public utilities prior to its consideration in rate hearings, and I shall endeavor to point out what has been attempted or even has

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been done in some instances to recognize the effects of inflation in computations of rate base, depreciation, and rate of return.

Rate Base

After several years of relative uniformity of regulatory concept, the rate base has once again emerged as a major item of controversy in rate determination.

Going back to 1898 in the case of *Smyth v. Ames*,¹ we come upon the beginning of an era of fair value rate bases. It would be well to recall that this decision followed the depression of 1893 and that William Jennings Bryan advocated the doctrine of fair value in an instance where property values were far below cost. Fair value and "spot" reproduction cost were declared practically synonymous in *McArdle v. Indianapolis Water Co.*² during 1926. The year 1936 saw the beginning of the trend toward original cost merely as a method of accounting required by Federal and state commissions but, eight years later, the Supreme Court in the case of *Hope Natural Gas Company*³ declared legal the use of original cost in rate determination. This far-reaching decision had the effect of converting many state commissions, including fair value states, to the use of an original cost basis.

With a few exceptions, where a value concept is in effect, rate cases within the past few years indicate that most commissions are still following the original cost concept. However, there are several significant instances of a change in philosophy, usually impelled by court action.

In 1950 the Michigan commission, by a 2-to-1 decision in the Consumers Power Company Case,⁴ redefined its previous position and adopted a basis of fair value representing a round judgment figure somewhere between original cost

and reproduction cost. As stated by the commission:

As we see it, the determination of fair value is a matter of judgment. It is to be exercised by the commission after giving careful consideration to all the various elements entering into the formation of a sound, reasonable, and intelligent judgment as to the present fair value of the property of the utility used and useful in its business.

In January, 1953, the Illinois Supreme Court reversed an Illinois Commerce Commission order in the case of *Illinois Bell Telephone Company*,⁵ requiring that the commission consider, among other things, the reproduction cost factor.

Similar court decisions in Maine⁶ and Maryland⁷ give strong indications that they might be forerunners of a new trend in regulatory approach, particularly in the many states whose statutes provide that public utility rates be based on fair value.

During 1952 Kentucky passed a law requiring consideration of reproduction cost among other elements in the determination of fair value. A recent effort to convert Maryland back to original cost by legislative action died in committee. A similar fate was accorded an effort to change Ohio's reproduction cost basis to fair value. In all these court and commission cases, the extent of the postwar inflation appears to be a principal factor which caused the change in rate-making philosophy. Although none of us expects to find a one-shot cure-all for inflation, it is obvious that under present circumstances some recognition will be given to this evil by the adoption of a fair value rate base.

As developed in recent cases, the concept of fair value resulted in a

¹ 169 US 466.

² 272 US 400, PUR 1927A 15.

³ (1944) 320 US 591, 51 PUR NS 193.

⁴ 82 PUR NS 97, 108.

⁵ 98 PUR NS 379, 111 NE2d 329.

⁶ *New England Teleph. & Teleg. Co. v. Public Utilities Commission* (1953) 98 PUR NS 326, 94 A2d 801.

⁷ *Chesapeake & P. Teleph. Co. v. Public Service Commission* (1952) 97 PUR NS 50, 93 A2d 249.

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round-amount judgment figure somewhere between original cost and reproduction cost, in both cases less depreciation. Trended original cost dollars (obtained by use of price indices) as well as engineers' reproduction cost estimates were used in determining reproduction cost.

As a general word of caution, it should be carefully noted that, in fair value cases, original cost is not guaranteed as a minimum factor. Furthermore, fair value brings in its wake additional problems, some of which I shall attempt to outline.

Many utilities, particularly those with major postwar plant investment, fear that a drop in prices may mean rate bases below original cost. A basic assumption by the advocates of a return to fair value is that we have reached a price plateau which cannot return to old low levels because of labor and government influences.

The injection of a replacement concept entails consideration of plants becoming obsolete by technical developments. Gas manufacturing plants superseded by the use of natural gas, and electric production equipment which might in the future be replaced by some form of atomic energy, may be severely dealt with in considering reproduction costs. The concept of reproduction cost must equitably take into account the fact that equipment is rarely replaced by an identical item, since advances in the field of power generation as well as distribution have been spectacular and the end is not in sight.

FROM a practical standpoint, a commission, which operates in a political atmosphere and is subject to public clamor, might find itself subject to attack from all sides in selecting a "judgment" rate base without revealing the details of its computation. Under such circumstances, the utilities may find themselves in an era of relative uncertainty in which the changing political mood will make prediction of future rates a difficult problem unless the aid of Dr. Kinsey's research team can be enlisted. On the

other hand, many feel that the original cost concept represents the low point and that any change must be an improvement.

In a recent case, the Georgia commission⁸ used invested capital (securities outstanding plus surplus) as a rate base. The use of invested capital eliminates questions relating to working capital and construction work in progress and offers the same base for judging the fairness of the return as is generally used by investors. The recording of interest on construction work in progress could be dispensed with if the utility were automatically to change its rate base to give proper weight to additional capital investments, earnings, and dividends. The question of possible unwise accumulation of unnecessary funds could not be realistically raised in an industry which must obtain regulatory approval for every new security issue. A multiple-purpose utility would, of course, require allocation of its capital to electric, gas, and non-utility operations.

AMONG the arguments advanced by proponents of this method is that it most closely adheres to Justice Brandeis' prudent investment concept that

The thing devoted by the investor to the public use is not specific property, tangible and intangible, but capital embarked in the enterprise. Upon the capital so invested the Federal Constitution guarantees to the utility the opportunity to earn a fair return.

The equity stockholders of a utility operating under either a capitalization or original cost rate base would receive no recognition for the effects of inflation unless some provision were made therefor, such as an increase in the rate of return.

We may eventually discover that the precise method of determining a rate base is not as important a factor as the attitude with which it is applied. However, I believe that equity capital of utilities should be treated on a basis relative

⁸ *Re Georgia Power & Light Co. File No. 19313, Docket No. 470-U, May 11, 1953.*

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to other comparable risks, and in terms of today's economy the fair value concept gives recognition to the risk factor.

In addition to plant in service, a rate base normally includes several so-called "fringe items" which are often topics of controversial discussion. Interest on construction of major projects is generally allowed to be capitalized and included in the rate base. However, there is no uniformity in the rates allowed. As a general rule, and except for special situations, the utility's allowed rate of return should be used in calculating interest on construction, particularly when the ratio of equity capital has not materially changed. While there is some feeling that construction work in progress should be allowed in the rate base as a means of eliminating the need to capitalize interest, rate proceedings are generally so few and far between that the capitalization of interest seems to be the most certain way to assure a return of the investment with respect to plants under construction.

Another "fringe item" is the unamortized balance of gas conversion costs of utilities which have shifted to the use of natural gas. The New York commission in two recent decisions excluded the item from the rate base but allowed the annual amortization as a deduction. Instead of a return on the unamortized balance of these costs it allowed as an operating revenue deduction interest on the funds required for the conversion.

Another item which has been treated in varying ways is the allowance for working capital. Without going into an analysis of the various concepts (and they certainly are various), I should like to point out that the earlier due dates for Federal income tax payments have tightened working capital requirements. This new factor should be taken into account by commissions who have been using a set formula for many years.

Depreciation

TURNING now to depreciation accounting, the basic question re-

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volves around the purpose of depreciation provisions. Do depreciation provisions of utilities merely represent an accounting device for the regular amortization of original cost dollars over a period corresponding to the estimated average life of the physical assets, or do these provisions serve as a means of keeping the plant intact by providing a reserve for replacing retired property?

In 1930 the Supreme Court stated in the United Railways Case⁹ that depreciation should be based on reproduction value but reversed its previous view in the Hope Natural Gas Company Case¹⁰ in 1944 and specifically disapproved the decision in the United Railways Case—the view of the court then being that depreciation is a means of recovering cost and therefore the company was being made whole.

Obviously, if a unit of property must be replaced at a higher price than that of the retired unit, additional investment is required to maintain capacity unless technical advances have been adequate to offset higher replacement prices. Although technological improvement has been tremendous, numerous items, such as underground conduits, copper, poles, gas mains, buildings, vehicles, etc., must be replaced at vastly increased prices with relatively little or no technical changes.

The utility industry has made a remarkable effort to meet the problems of inflation by the means of technological improvement. However, spiraling wages, fuel, and other operating costs in the postwar period have outstripped all efforts to keep costs down by developments in the art. However, notwithstanding increased costs, utility rates charged to consumers have been remarkably stable.

AN important aspect of electric and gas utilities in this respect is the relatively large plant investment necessary to carry on operations. Almost four years of gross operating revenues are

⁹ 280 US 234, PUR1930A 225.

¹⁰ 320 US 591, 51 PUR NS 193.

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necessary to equal the cost of such utilities' investments in physical plant, which is composed of relatively long-lived equipment. The amortization of this high proportion of past capital costs prevents utilities from matching current costs against current income. This same problem in relation to inventories has been met by the adoption of the last-in first-out method of pricing inventories in many industries.

Plans have been suggested by which annual depreciation provisions would be increased through use of a price index factor to provide for replacement on a current dollar basis. Proponents of this concept state that such a policy will protect the enterprise from the effects of inflation by permitting maintenance of capacity through adequate replacement provisions. They also contend that it is in the interest of consumers who, under such a plan, would not be called upon to pay a return on the increased capitalization necessary to replace plant capacity.

The advocates of a replacement depreciation basis believe that in the long run the provisions should not exceed total plant investment. The problem is one of matching depreciation provisions in cheap dollars against cheap dollar revenues; otherwise conventional accounting results show a distorted picture of the economic facts because of the time lag which utilities face in recovering plant costs and the influences thereon of our changing economic cycle.

A MODIFIED version of the above method was recommended by Peoples Gas, Light & Coke Company in a recent rate proceeding before the Illinois commission.¹¹ In general, the company, in its presentation, computed depreciation provisions by converting the cost of property consumed into current dollars through use of the Bureau of Labor Statistics Consumers Price Index. However, the excess of economic depreciation over conventional straight-line depreciation was taken only on that portion of plant

dollars represented by equity capital; namely, 60 per cent. Under the accounting method advocated, the additional depreciation so provided would have been credited to a "Common Capital Adjustment Account" not available for dividends and would not be deducted in the computation of an original cost rate base.

The proposal was not successful but a fair value rate base was attained subsequent to the decision by the Illinois Supreme Court in the Illinois Bell Telephone Case.¹² The provision for depreciation allowed in the Peoples Gas decision was based on original cost plus an additional allowance for anticipated obsolescence.

Although the Peoples Gas proposal would provide for financing of 60 per cent of the additional replacement cost of retired plant, the company would still be required to find means for financing the remaining 40 per cent. Granted that the bondholders themselves have suffered a loss through inflation, the company has gained nothing since it is still faced with the necessity of replacing the entire property at higher prices. The annual cost to the utility is the partial exhaustion of its entire property and, in economic terms, this cost is incurred at current cost levels. The utility's position in this regard would not be any different if its capitalization included 40 per cent in bonds or zero per cent in bonds.

GETTING right down to the core of the problem of replacement depreciation, it seems to me that the question at issue revolves around the rate-making philosophy of determining which consumer, present or future, should bear the increased replacement cost of plant (this higher replacement cost being due principally to influences of inflation) while the plant is being consumed by the utility in servicing the present consumer.

To date, no regulatory commission has adopted replacement depreciation in the determination of rates. In recent rate cases depreciation was computed in all

¹¹ (1953) 99 PUR NS 361.

¹² (1953) 98 PUR NS 379, 111 NE2d 329.

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instances on original cost of the properties in arriving at the amount of the utility's return, even though in some cases a fair value rate base was allowed.

Amortization of Emergency Facilities

LET us leave depreciation at this point and go on to the subject of amortization of emergency facilities. Federal and state regulatory commissions have recently considered or are now considering the accounting required and the application in rate determination of Federal income tax reductions allowed companies which elect to amortize, over a 5-year period for tax purposes, the costs of plant facilities certified by the Defense Production Administrator as emergency facilities. Depreciation on such amortized facilities after the 5-year period will not, of course, be included as deductions in computing Federal income taxes, with the result that such taxes will be greater.

As in the case of industrials, public utilities which amortize certified facilities for tax purposes receive assistance in financing by means of tax deferral. That is the only advantage, benefit, call it what you will, that either industrial or utility companies receive from the 5-year amortization of emergency facilities.

The announced purpose of the legislation enacting § 124A of the Internal Revenue Code was to encourage private companies to build facilities needed for defense by permitting them to amortize, for income tax purposes, certified facilities equally over five years without regard to regular amortization provisions of the tax law. Notwithstanding the requirements for balancing the budget (a matter in which all of us are vitally interested), Congress passed this legislation because of the need for rapidly stepping up the country's production potential.

IT is my opinion that public utilities, for both accounting purposes and rate determination, should provide for depreciation equally, by years, over the

estimated useful life of the properties and that an amount equivalent to the tax reduction (representing the reduction attributable to the excess of amortization over normal depreciation) during the 5-year amortization period be included in "operating revenue deductions" in arriving at "total utility operating income." For the period subsequent to the amortization period, the increased income taxes attributable to depreciation on the amortized facilities should be excluded from "operating revenue deductions" and "total utility operating income." In this manner the consumer would be accorded fair treatment throughout the life of the property. The consumer will receive the same treatment whether or not the utility is allowed accelerated amortization under certificates of necessity.

At the present time commission accounting orders issued to public utility companies by twenty states relating to amortization of emergency facilities have come to my attention. In all cases but one, the accounting prescribed for the tax reduction in the determination of "total utility operating income" during the amortization period conforms to sound accounting practice and is in accord with the views previously expressed by me; that is, as a charge "above the line." In the latest orders, the accounting for the corresponding credit prescribed that it be recorded in a subdivision of earned surplus such as restricted surplus by fourteen states and in a reserve for deferred income taxes by five states.

SUBSEQUENT to the amortization period, annual charges to "surplus" or the "reserve" and corresponding credits to income (above the line) are based in certain states on normalizing the income tax consequences and in other states on apportionment over arbitrary periods generally approximating the estimated life of the properties.

Although there is no assurance as a matter of public record that all of these nineteen state commissions will adopt the same policy for rate determination it

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would appear, on the basis of the prescribed accounting, that there is a strong presumption of fair treatment to ratepayers, management, and investors.

In the twentieth state, no equivalent charge was to be made against income, but the increase in income resulting from the tax reduction was to be transferred to a restricted surplus account. However, in the determination of rates, income is "normalized" in a manner generally corresponding to the accounting treatment of the other nineteen states.

Malcolm F. Orton, director of public utilities, New York Public Service Commission, in a paper prepared for a meeting of the National Association of Railroad and Utilities Commissioners held at Little Rock, Arkansas, in November, 1952, expressed the following viewpoint which I feel sure will be of interest to you:

By leaving rates unaffected by the certificate of rapid amortization and by keeping net income as it would have been, normalized if you want to call it that, the customers in both periods are treated fairly, no disturbing ups and downs are introduced into net income, and the company is provided with the necessary capital for a large portion of its plant additions without (interest)¹⁸ cost, thus reducing its over-all cost of capital, and no obstacles are placed in the way of the provision of necessary facilities for national defense. Certainly all of these results are desirable.

THE Federal Power Commission has under consideration an amendment to its Uniform System of Accounts which provides that when a utility elects or is directed by a commission to set up a reserve for the deferred tax, the amount of the tax reduction during the amortization period is shown as the last item (Account 539) before the item termed "Net Income after Provision for Future Taxes" and the corresponding credit is made to a reserve (Account 259). After

the period of accelerated amortization is terminated, Account 539 is credited and Account 259 charged each year with an amount equal to the amount accumulated in Account 259 divided by the average estimated remaining service life of the property, or such other amount as may be fixed by the commission.

While I do not know the present views of the members of the Federal Power Commission in this matter, on November 10, 1952, the commission issued an opinion and order approving an interim settlement in the matter of Texas Eastern Transmission Corporation. The following is quoted from the order:

Texas Eastern be and it is hereby authorized to file and make effective as of December 1, 1952, the tariff sheets attached as Exhibit A to the "Statement of Basis for Interim Settlement" (Exhibit 61) in the record of this proceeding, upon the following condition:

Texas Eastern shall first agree in writing to refund to its customers, upon such reasonable basis as the commission may direct when and if such refund becomes necessary, all Federal income tax credits or allowances arising out of its election to exercise its rights to accelerated tax amortization under Necessity Certificate TA-NC-10357 for the period the rates permitted herein to become effective on December 1, 1952, are in effect.

The views of the commission's staff were expressed in the oral argument of staff counsel before the commission hearings held in Washington on March 18, 1953, relating to the treatment of Federal income taxes as affected by accelerated amortization. Its position is that for both accounting and rate-making purposes the commission should allow only the taxes actually paid during the amortization period.

LET me point out one effect of a policy of allowing only taxes paid in the determination of rates. A reduction in rates to consumers would result in the

¹⁸ The word (interest) has been added.

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payment of less Federal income taxes by the utilities during the amortization period. For instance, on the basis of 1952 tax rates of 52 per cent, it would require rate reductions to consumers of \$2.08 for each \$1 of tax reduction in order to reduce a utility's operating income for the amount of the tax reduction resulting from amortization of emergency facilities. I have heard no views expressed in connection with the legislation relating to § 124A of the Internal Revenue Code whereby the granting of certificates of necessity would result in substantially reducing or deferring corporation income taxes beyond that contemplated in § 124A.

The magnitude of the consequences of such a policy is illustrated by statistics compiled by the Federal Power Commission which showed that at October 22, 1952, electric and gas utilities subject to the Federal Power Act and the Natural Gas Act had received certificates for accelerated amortization for approximately \$1.3 billion of facilities certified for amortization. To this figure must be added the facilities certified since October, 1952, and also the very substantial amounts of certified facilities of utilities which are subject only to state regulation.

The attitude of the staff of the Federal Power Commission is further explained in the following quotation from a statement made by staff counsel at the hearing on March 18, 1953:

We further maintain that if the tax savings are to be treated as cost of service in rate making, the amounts paid by the consumers must be deducted from gross investment in the determination of the rate base. . . . If the cost of these facilities is included in the rate base, the consumer will be required to pay a return on the funds obtained from him.

I AM at a loss to understand the reasoning for the position taken by the commission's staff since with taxes "normalized," from the viewpoint of equity, the consumer is accorded the same fair treat-

ment whether or not the utility amortized its defense facilities for tax purposes over the 5-year period.

A utility faced with the fact that it would be required in rate determinations to treat the tax reductions in the manner advocated by the staff of the Federal Power Commission would, no doubt, be forced to forego the amortization and claim for tax purposes only the normal amount of depreciation and would thereby be unable to avail itself of the assistance in financing granted by Congress to all companies which qualified for the certification of emergency facilities.

It is regrettable indeed that companies operating under the jurisdiction of certain regulatory commissions do not, at present, intend to exercise their rights to amortize for tax purposes certified facilities over a 5-year period. I sincerely hope that such commissions will consider this entire matter in the light of fairness to the consumer, the management, and the investor.

Rate of Return

AND now for the last topic—rate of return. Determination of a fair rate of return is a problem which requires the patience of Job and the wisdom of Solomon. Anyone who has tried to analyze conflicting expert testimony and statements made with respect to cost of capital, the reasons why such a method does not produce proper results, or the market effect of floating a new security issue, undoubtedly knows what I mean.

At the risk of oversimplifying an extremely complicated subject, I'll attempt briefly to get at the heart of the question.

Bondholders and preferred stockholders contract for a fixed return and there is no doubt about their status. They, in effect, place their faith in the value of the dollar. They are protected against depressions but bear the risk of inflation.

The common stockholder is in a different situation and he represents the real problem. Some commissions seem to regard utility common stock as a "last

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preferred," subject to a rigidly fixed return. This view I regard as fallacious.

An equity owner in any business bears the brunt of the risk. Let us not forget that our system of free enterprise owes its present status of world leadership primarily to people who were willing to take major risks. The question for us then is whether the utility common stockholder is so sheltered by regulatory protection that his investment should be regarded as something less than risk capital.

What are some of the risks he takes or has taken?

1. *The regulatory risk.* He has in the not too distant past been charged for good costs prudently made in excess of original cost and is subject to similar charges relating to utility properties purchased. In practically all instances these costs were disregarded in rate determination. He has also been charged, in many instances, for retroactive depreciation reserve adjustments.

2. *The technological risk.* The development of atomic power might only mean a change in boiler equipment. However, it might also develop to the point where industrial plants might be able to produce their own power and this load could be lost to the utilities with serious effect.

3. *The demand risk.* Centers of population change, cities and towns decline as others develop, industries shift from one area to another. Utilities are the least able to pack up and move.

4. *Government competition.* The encroachment of tax-free government power may have temporarily receded under the present national administration. However, this is a real risk which would become a grave one should rigid regulation impair the ability of the utilities to raise equity capital.

5. *Industry obsolescence.* During the past half-century several industries whose securities were once highly regarded by investors have suffered partial or complete obsolescence. Among these I would list street railways, coastwise shipping, and certain railroads.

While we, today, cannot conceive of mass utility obsolescence, let us not forget that we are living in an age of insecurity and sudden change. Would you have predicted a few years ago that in 1952 Argentina would be rationing beef and importing wheat?

6. *The "lag" risk.* A serious burden to regulated industries during periods of rising costs is the delay aspect of rate proceedings. This "lag" and the tendency to authorize bare minimum rates often result in a rate deficiency which is not compensated in succeeding periods.

While we are on the topic, I should like to point out that the "lag" problem is subject to a fairly simple solution. Successive rate proceedings are costly and are also damaging both to the company and to the commissions from the viewpoint of public relations; they could be held to a minimum by the use of automatic cost adjustment clauses. Such clauses, applicable to significant increases or decreases, principally in basic wage and tax rates, could be applied in a manner similar to present fuel adjustment clauses and shown as one combined adjustment factor on bills rendered to customers.

The full details of the cost adjustments would, of course, be reported currently to regulatory authorities.

It is obvious that the determination of a fair return on utility common stock must include consideration of a fair relationship to other risk returns.

In this connection let me quote a statement made at the 1950 convention of the NARUC in the report of the committee on corporate finance:

Since the last war there has been a greater spread between the earnings of utilities and industry generally than existed previously and if this spread is to be continued through holding down rates to bare subsistence levels it is highly questionable if the public interest will be served in the long run.

Tremendous strides have been made by the utility industry in its present form

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of regulated tax-paying private enterprise. Failure to maintain an adequate risk return to equity investors could undermine the vitality of this system. Should this happen, the alternative would be government operation or government subsidy, which at best would represent a drift toward Socialism.

IN closing I should like to state that public utilities are vital servants of all the people and, in terms of our present

standard of living, the service they render is a relatively low-cost item. We can always get more and better service out of a healthy vigorous servant, but it takes more than a bare subsistence diet to maintain real vitality. Whatever our theories of computing the individual factors which make for a proper charge to consumers and a fair return to investors, a philosophy of fair play is really all that is required to keep faith with present consumers, management, and investors.

Public Utility Regulation and the Securities Market

By ALBERT H. GORDON*

It is flattering to the investment banking fraternity that you have asked me, a member of it, to be on this panel. It was only ten years or so ago that Jerome Frank, an SEC commissioner in the days of its political power, indicated that utility managements need not consult outsiders for within the SEC were all the brains necessary for almost any kind of advice.

The subject of this afternoon's discussion for a nonlawyer or nonengineer like myself is a tongue twister. You have heard words of wisdom from my predecessors. I will confine my comments to the effects of rate regulation and rate base on the securities market and on the business of the investment dealer, together with a few remarks regarding some of the regulations under which many utilities today have to finance.

By way of explanation, the investment dealer is ordinarily one who distributes many types of securities to his clientele, including industrial securities, which are tailor-made for the market jointly by the issuer and the underwriting distributor, and sold after careful planning. Such is usually not the case in utility issues, for often they are hammered out by a commission and the issuer with, in our opinion, consequent increase in costs. For example, AAA industrial bonds today

sell on approximately a 3.15 yield basis as contrasted with a 3.30 basis for AAA utilities. No blue chip utility common stock sells on as low a dividend yield basis or as many times earnings as some of the prime industrial stocks.

Most of the new issues of corporations and municipalities are sold through investment dealers. To remain in business long a dealer must confine his business to securities that are marketable at a reasonable profit and that should be sound investments. To do so the average investment firm has a staff of experts classifying new issues into good, bad, and indifferent grades. Some similar staffs with similar analysis assignments are found in practically all the organizations with large amounts of funds to invest. In analyzing utility securities various criteria are used, such as source and quality of revenues, management, territory, growth potentials, and capitalization—but the most important of all has come to be the rate climate and regulation.

Until price controls were removed after the war, rates, particularly electric rates, for many years prior to the war had been lowered frequently as a result of the economies from increased output and technological improvements without corresponding increase in investment. The spotlight of the investor and his ad-

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visers was not focused sharply on the treatment of rates, for the number of new issues of common and preferred stocks of utility companies was relatively small.

In 1946, before the inflation hidden in our economy became geared into prices, utility common stocks tended to be valued on a group basis, varying with the size and location, the type of capitalization, and the yield. But investment results since 1946 have not been uniform. For example, the price of common stocks of the Pacific Gas and Electric Company, Boston Edison Company, California Electric Power Company, and the Central Maine Power Company have declined from their 1946 highs to their present prices, an average of 24 per cent, while the stocks of American Gas & Electric, Cincinnati Gas & Electric Company, Public Service Company of Colorado, and Houston Lighting & Power have increased during the same period approximately 38 per cent in value. The logical reason may well be that the rate climate of the latter companies has been far better than the former. It cannot be growth for then how could the divergent price trends of Pacific Gas and Electric and Cincinnati Gas & Electric common stocks be explained?

THE companies operating in a reasonable rate climate are getting their money at a lower cost. In general their common stocks can be sold at substantial premiums over book value and on relatively low yields. Such companies tend to retain more of their earnings in the business in the belief that fair treatment will be given reinvested funds; as a result they need relatively less new common stock money. Financing costs, that is cost of issuance and subsequent dividends, are much higher for common and preferred stocks than for bonds because (1) the stock investor must be paid more than the investor in senior securities, (2) the cost of distributing common stocks, by reason of the type of distribution, is considerably higher,

and (3) dividend payments on stocks are not deductible from income in calculating taxes. I doubt that it is generally realized except by the management that the annual expense of servicing the capitalization of most utilities is over 20 per cent of the gross revenues. As a consequence the favorable regard of stock investors is of great importance to any utility company.

The utilities' requirements for outside funds continues to be great. Since we are now in a buyer's market, the competition for the funds available for the utility industry and other users of capital is keener than it has been for years; and certainly the competition for funds between companies in the utility industry is stronger than ever. And so today's facts of economic life necessitate broad-gauged rate treatment.

By and large I would say that since the end of the war, the majority of the regulatory commissions of the country have followed fair policies in allowing rate adjustments for rising costs, and under such policies most of the regulated utilities have been able to sell at a reasonable cost the tremendous amounts of securities required to finance their heavy construction programs. There have been, however, a number of exceptions to this generalization. I shall name two; in addition there are, unfortunately, many others.

As a result of politically minded regulation by the local Pinellas County Utility Board, Florida Power Corporation's earnings declined so markedly beginning in 1950 it became increasingly difficult for the company to secure funds to carry on an essential and urgent expansion. A continuation of such punitive regulation would have had dire results for the company and serious consequences to the many people it served. Sentiment against the Pinellas County Board became so strong that the Florida legislature voted to give rate-making powers to the state commission, thereby in effect taking it away from the Pinellas Board. The state commission subse-

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quently gave fair and constructive treatment to the utility; the company's credit was thereby restored to a sound basis and the company resumed its financing on an economic basis.

THE other example I will cite is the New England Telephone Company, a majority of whose stock is owned by the American Telephone and Telegraph Company. In the 1948 rate case the Massachusetts commission ruled that the balance of earnings of about 6 per cent for the capital stock was adequate. An over-all rate of return on the total capitalization of 4.77 per cent would have resulted.

As a consequence of the rate order the stock of the company continued to sell well below par, thereby precluding the sale of common stock so essential to the completion of its financing program. Funds had to be borrowed on an unsecured basis from its rich parent; at the peak they amounted to the huge sum of \$100,000,000. Fortunately for the good of telephone service in the state, the Massachusetts Supreme Judicial Court in 1951 found that an over-all return on total capital of less than 6.23 per cent would be confiscatory.¹ Rate treatment in some of the New England states has been so restrictive that many potential investors have been scared away by fear of unfair treatment. For example, the recent favorable action by the Maine Supreme Court in the New England Telephone Company rate case appears to be ignored in the market, so distrustful is the potential investor in Maine securities towards his long-range treatment.

It is an interesting commentary that while the ten largest investment trusts in Boston have total assets of \$1.5 billion they have but \$3,400,000 invested in New England utility common stocks—and half of the \$3,400,000 is in a special situation. These trusts own approximately \$156,000,000 of utility common stocks outside New England.

¹ New England Teleph. & Teleg. Co. v. Department of Public Utilities, 88 PUR NS 73, 97 NE2d 509.

DURING past months we have noted certain encouraging trends affecting the problem of rate base and rate of return determination. These factors have been evident in varying degrees; if they are extended they should improve the return on investment in many public utilities and will redound to the benefit of the companies through relatively lower cost of capital resulting from improved investor confidence.

(1) *Rate Base.* It has been the practice of many, if not most of the regulatory commissions, to determine a rate base by averaging the net plant investment at the beginning of the year and at the end of the year. In times of modest additions to plant investment this practice was not significantly harmful to the industry. But such has not been the case in recent years where large additions to plant have been made year after year. Some commissions, recognizing the injustice of the average rate base, have used a rate base predicated upon the net plant investment at the end of the period.

The most recent pronouncement on this subject was made by the Florida Railroad and Public Utilities Commission in its order involving Florida Power Corporation, dated July 23, 1953.² It is so important I will quote several paragraphs from it:

... where a utility is in the throes of unusual growth and confronted at the same time with constantly increasing investment and operating costs, conventional notions of rate making must be adjusted to the circumstances and this is especially true where net earnings fail to keep pace with heavy additions made and to be made in plant investment. Where there is little fluctuation in a utility's investment accounts from the beginning of the year to the end of the year, we believe that the rate base should be predicated upon the net average investment for the test period. We have followed that method consistently for many years and will continue to do so whenever

² 99 PUR NS 129, 134, 135.

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and wherever the investment accounts disclose nothing more than a normal growth. In the present case, a net average investment rate base for the test year 1952 would be \$76,000,000 in round figures whereas the utility at the end of 1952 had more than \$95,000,000 invested in electric plant. If we use the average investment for the year 1952 in determining the rate base, we would assume an investment level that is more than a year old. Such a rate base would bear no relationship to the actual conditions as they now exist. . . . Inasmuch as we are here fixing rates for the present and for a reasonable time in the future, we should not use an investment figure that is already more than a year old. . . . We must be fair to the public and exercise our rate-making power in such a way that the public is protected against exorbitant or unreasonably high rates. At the same time, the interest of the utility, and those who invest in its securities, must also be protected against noncompensatory rates. At best there is always a delay or regulatory lag of several months between the time a utility applies for a rate increase and the time a regulatory agency is able to make its final decision on the application. . . . If such losses incurred through the regulatory lag are further augmented by the adoption of an average investment rate base which coincides with an investment level more than a year old, then the utility becomes the victim of confiscation; it cannot successfully sell its securities to raise the capital with which to finance its expansion program; customers are unable to secure adequate service; prospective customers are unable to secure any service; and the public suffers. In the present case we have adopted a year-end base . . .

ANOTHER commission, the public service commission of Wisconsin, in a fairly recent rate case involving the Wisconsin Power & Light Company has gone even farther and adopted a rate

base calculated on the average of net plant investment existing at the time and estimated to be in existence approximately one year in the future. In other words, the commission recognized that since it was fixing rates for future periods it was only fair that those rates be based to some extent at least on plant investment that would be in existence in the future.

This recognition by commissions that capital must be raised in advance of construction of physical facilities is important. The principle should be forcefully presented to those commissions that have not yet admitted its soundness.

ANOTHER significant trend affecting rate base determination has been the greater consideration given to reproduction cost in certain jurisdictions. No doubt much of the impetus behind this liberalization has come from court decisions which have recognized the obvious need for a higher dollar return which a spiraling inflation has made imperative. I think, too, that the change in the national administration has also been responsible for the better attitude in many quarters toward American business. The philosophy of the new administration was set forth in a speech by Secretary of Commerce Sinclair Weeks before a meeting of the American Iron and Steel Institute on May 28, 1953. In this address the Secretary laid particular stress on the unfair method by which government has been regulating the public utility industry, and stated, and I quote: "This administration believes that it is the intent of Congress in its approach to regulation to allow earnings which will make the system of private ownership work."

(2) *Rate of Return.* For many years, perhaps under the leadership of the Federal Power Commission, rates of return for public utility companies, both in the electric and in the gas fields, have been determined on a rather strict application of the cost of capital theory. In an early case the Federal Power Commission set a return of 6½ per cent for natural gas

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pipeline companies; after keeping this rate for a number of years it reduced it first to 6 per cent and then to 5½ per cent in the Northern Natural Gas Company Case last year.³

The announcement of the Northern Natural Gas decision caused consternation in the industry, and particularly among those companies planning financing of more pipeline enterprises. For example, Gulf Interstate Gas Company's line from Louisiana to West Virginia was then in final planning stages. Its mortgage money committed for months before was to cost 4½ per cent—a rate certainly not obtainable in the present money market—and its junior notes were to bear a 6 per cent interest rate.

It was certain an over-all rate of return of less than 6 per cent would have made impossible the sale of the common stock upon which the rest of the financing depended. The commission finally allowed a 6 per cent rate of return. Such a rate was a minimum for it took weeks for a strong nation-wide syndicate to effect the distribution of the common stock. All of which proves that had the FPC made a 5½ per cent rate a basic policy many new and desirable lines would have died in the planning stage.

THE increase in money costs of the last ten months has made the low rates of return doubly unfair; in some recent cases a recognition of the higher cost of money has resulted in an upward adjustment in the allowed rate of return. Furthermore, the Federal Power Commission's Northern Natural Gas decision was remanded by the U. S. Court of Appeals on the grounds that the commission did not indicate its reasoning or on what basis it arrived at a rate of return lower than that recommended by any of the witnesses who testified in the proceedings.⁴

We see evidence that commissions may

be moving away from a rigid application of the cost-of-money theory determined on a mathematical basis without making allowance for presently unknown future conditions during which time the rate of return determination will be applicable.

One example of this is in the 1953 Florida order which I have previously quoted. With respect to this matter the commission said:⁵

... At the present time a return of only 6 per cent would not appear to be fair and reasonable for a public utility which is engaged in a tremendous expansion program which must be financed by the issuance and sale of large amounts of bonds and stocks of the utility. In view of the current cost of capital and the condition of the money market today, concerning which there appears to be no immediate prospects for improvements, a rate of return of something in excess of 6 per cent, but less than 6½ per cent would, in our opinion, be reasonable for an electric public utility having a financial history and expansion program similar to the applicant. . . .

In our opinion, applicant will require a rate of return of 6.45 per cent . . . in order to pay its operating and maintenance expenses, taxes, depreciation expenses, debt service, and provide a fair and reasonable return for its common stockholders.

Not only does the rate of return and the rate base affect the capital cost of new money for the utilities, but so also does the method of sale of utility securities. While there doubtless were many instances during the years of rising bond prices in which the compulsory competitive bidding rule as promulgated and enforced by the SEC and FPC resulted in higher prices for public utility issues, its soundness has never been convincingly proven.

The SEC has in many cases disregarded the manifest absurdity of the

³(1952) 95 PUR NS 289.

⁴Kansas State Corp. Commission et al. v. Federal Power Commission (CA8th) Nos. 14,704, 14,706, 14,733, 14,743, July 20, 1953.

⁵99 PUR NS 129, at pp. 136-138.

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public offering of small bond issues of public utilities. The cost of the necessary registration statements for such issues would be considered prohibitive by any economic test. I noticed in the papers a few days ago the announcement of the prospective sale at competitive bidding of a \$3,000,000 bond issue of the Worcester Gas Light Company, a subsidiary of a holding company regulated by the SEC. The registration statement, practically useless to the ultimate buyers, probably cost at least \$25,000 or a full point a bond. Such a price, which is repeated many times during the year, is a heavy one to maintain the consistency of the SEC dogma.

But leaving aside the relatively high costs for small issues many weaknesses in compulsory competitive bidding have been disclosed during the recent months of falling bond prices and at times of chaotic conditions in the bond market. And such weaknesses are magnified in the preferred and common stock new issues market.

UNLIKE a negotiated offering a competitive bidding issue must operate within a rigid framework which permits little or no flexibility as to offering date. Such an offering has to be geared to a schedule fixed long in advance. The most striking example of the expensive effect of such enforced planning was the common stock offering of 150,000 shares of Minnesota Power & Light Company in December, 1950. The management of the company, realizing the uncertainties of the time, had in vain asked the FPC for exemption. Bids in accordance with the FPC enforced advertised timetable were opened during the collapse of the stock market resulting from the invasion of North Korea by the Chinese Communists. I don't need to tell you the company received much less for its common stock than it could have obtained by a negotiated offering.

Just as in timing so also in the actual distribution of securities does compulsory competitive bidding permit less flexibility. For here also competitive bid-

ding operates within a more rigid framework than negotiated offerings. Because of the uncertainty as to whether any particular underwriting group will be the successful bidder, less advance preparation for the distribution takes place under the compulsory competitive bidding procedure. Moreover, the division of distribution strength among the various bidding groups results in a weaker distribution organization than would be the case in negotiated underwritings where strength can be concentrated. The great advantages of the negotiated method of financing are apparent in falling markets.

No high-grade industrial bond offerings, all of which have either been negotiated or placed privately, have failed in recent months. On the other hand, in May and June of this year there were three major offerings of utility bonds totaling \$95,000,000 under competitive bidding in which the bids were rejected. And in a fourth case no bid was received. The failure of these offerings not only adversely affected, temporarily at least, the credit of the companies involved, but also the general market.

THE self-protective nature of the Securities and Exchange Commission rule with reference to applications for exemption from competitive bidding is not as widely known as it should be. It was announced in Holding Company Act Release No. 7973 in the matter of New England Gas & Electric Association, dated January 14, 1948:

However, we now announce that it shall hereafter be our policy to deny summarily any application for exemption from the competitive bidding requirements of Rule U-50 where competitive bidding is *prima facie* required and the applicant has, before obtaining an authorization from this commission, entered into any discussions or any negotiations with respect to the terms of sale with any prospective purchaser of its securities.

Parenthetically, the Federal Power

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Commission follows a similar procedure. Under this policy the utility which proposes to issue securities but which has not reached a determination as to whether to go the competitive bidding route or to apply for exemption from the competitive bidding rule is precluded from having any discussions or any negotiations with respect to the terms of sale with any prospective purchaser of its securities. The clause "any prospective purchaser of its securities" would, of course, cover any institutional or other buyer and any investment banking underwriter. This so-called "green light" procedure is a clever device to prevent evidence that the commissions have been wrong; it should be unmasked as such. As a result of the rule "theory" and not economic competition has prevailed.

IN my opinion, compulsory competitive bidding was foisted on the public utility industry. The SEC, the FPC, and other commissions with authority over the issuance of securities should reassume the responsibility of policing the new issue market and not avoid the responsibility by willy-nilly insisting on competitive bidding.

As it is management's duty to obtain funds at the lowest possible cost, it should be permitted to select the most economical method of financing. At one time management might deem it advantageous to use competitive bidding, at another time private placement, and another a negotiated transaction. Its decisions would, of course, be subject to the review of the appropriate commission.

The comments of Judge Medina on

page 12,607 of the marathon antitrust case against seventeen investment bankers regarding the genesis of the competitive bidding rules are interesting. "But the fact is that it does seem as though there might be something in what various lawyers for the defendants have urged upon me: that some of these people made such a nuisance of themselves raising these ructions with the various public bodies involved, that the only way they felt they could get rid of that incessant carrying on of hearings and attempt to decide things that they could avoid deciding was to put it in competitive bidding. But, as I have repeatedly said, it is not for me to decide here on the merits of competitive bidding."

ICAN'T resist quoting from the testimony of H. L. Stuart, one of the chief protagonists of compulsory competitive bidding. In answer to a defense question "Did you ever suggest to Mr. Insull (Commonwealth Edison Company) during this period, 1908 to 1931, that he ought to put his securities up at public sealed bidding?" Mr. Stuart replied "No Sir," and to the further question "Why Not?" "Well, because we had the business."

In conclusion permit me to pay the legal profession a compliment. Lawyers for the utility companies have done much to educate commissions on the soundness and necessity of reasonable rate policies. I am sure they will not let up in the campaign and that, as a consequence, relatively lower cost of capital will ensue from increased investor confidence.

*For Titles and Index to Public Utilities Reports,
preprints, see, ante, page 604.*

TENNESSEE RAILROAD AND PUBLIC UTILITIES COMMISSION

Re Southern Bell Telephone &
Telegraph Company

Docket No. U-3314
July 14, 1953

APPPLICATION by telephone company for authority to increase intrastate rates; denied.

Valuation, § 39 — Rate base determination — Current cost.

1. Proof purporting to show the "current cost" value of a telephone company's intrastate property was rejected for rate-making purposes as being highly conjectural, speculative, and unrealistic, p. 36.

Return, § 15 — Reasonableness.

2. A rate of return must be examined in the light of all relevant facts and circumstances, p. 37.

Return, § 41 — Reasonableness — Intercorporate relations as factor.

3. A telephone company's affiliation with the Bell Telephone System is a pertinent factor in assessing the reasonableness of the company's rate of return, p. 37.

Return, § 26 — Cost of capital — Debt ratio.

4. A 45 per cent debt ratio was adopted for the purpose of fixing a telephone company's rates in order to achieve a proper "balancing of the investor and consumer interests," although the company's actual debt ratio for the test year averaged only 23.8 per cent, p. 38.

Valuation, § 224 — Rate base determination — Construction work in progress.

5. Plant under construction should be excluded from a telephone company's rate base, since when the construction work is completed and the new plant is placed in service, the total cost, including interest, taxes, and other overheads during the construction period, is capitalized, p. 43.

Valuation, § 299.1 — Working capital allowance — Tax accruals.

6. Working capital should be excluded from a telephone company's rate base where the company accrues a substantial sum of money for Federal income taxes and other purposes, in excess of working capital requirements, considerably in advance of disbursement time, p. 43.

Expenses, § 15 — Reasonableness — Burden of proof.

7. A public utility seeking an allowance for operating expenses for rate-making purposes must submit substantial evidence to show not only the amounts in its various accounts but also their reasonableness, p. 44.

Return, § 22 — Reasonableness — Expenses — Depreciation.

8. Public utility rates must be sufficient to cover all necessary operating expenses, including depreciation and taxes, in addition to interest on the debt, reasonable dividends, and a margin for surplus, p. 46.

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Return, § 111 — Telephone company — Dividend requirements.

9. A dividend rate of 6 per cent was adopted for the purpose of determining the earnings requirements of a telephone company, p. 47.

Return, § 25 — Reasonableness — Dividend requirements of other enterprises.

Discussion of the dividend requirements of the natural gas and electric utility industries as means of determining the dividend requirements of a telephone company for rate-making purposes, p. 47.

(PENTECOST, Commissioner, concurs.)

By the COMMISSION: On August 15, 1952, Southern Bell Telephone and Telegraph Company filed the instant application for an increase of approximately \$5,000,000 a year in its prevailing intrastate rates and charges in Tennessee. It assigned the following principal reasons for this increase: (1) a wage raise granted to its employees in June, 1952, which, with incidental costs, was estimated at \$1,319,154 on an annual basis; (2) higher construction costs; and (3) alleged deficiencies in previous rate increases authorized by this Commission.

Initial hearings were held on October 8 and 9, 1952, when the applicant offered testimony and exhibits in support of its application. This proof was predicated on the company's alleged operating results during the 12-month (test) period ending June 30, 1952, as adjusted by it to give full effect to the June, 1952, wage increase and other cost factors. The hearing was then adjourned to afford the Commission staff and the intervening cities an opportunity to examine the proof adduced by the applicant and to prepare for cross-examination and rebuttal thereof.

At the resumption of hearings on February 16, 1953, Southern Bell requested and was granted leave to in-

sert in the record various operating data based on the calendar year 1952, purportedly for the general information of this Commission. Upon the completion of this insertion, counsel for the company moved, in effect, to amend its original application and proof, based on the twelve months ending June 30, 1952, by substituting therefor its alleged revenue requirements and newly inserted data in support thereof based on the calendar year 1952. Counsel for the Commission promptly opposed this motion, and our ruling thereon was reserved. Proceedings were then continued through February 17th, at which time the Commission staff presented affirmative evidence in opposition to the proposed rate increase, based on the company's adjusted operating results during its originally chosen test year, namely, the twelve months ending June 30, 1952. At the conclusion of the staff's case, counsel for the applicant requested an opportunity to analyze the evidence thus presented and to prepare for cross-examination of the staff's witness. An adjournment was taken for that purpose until March 17, 1953.

The hearings which were resumed on March 17th continued through March 20th. Counsel for the company cross-examined the staff's witness, after which both the company

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and the staff offered additional proof based on the original test year. The case was finally submitted on March 20th.

I. Commission's Previous Rate Order

On January 31, 1952, after public hearings, this Commission issued an order in Docket No. U-3177, 93 PUR NS 12, effective February 1, 1952, authorizing Southern Bell to increase its "coin box" or "pay station" rates from 5 cents to 10 cents per local call, and to apply a temporary surcharge of 10 per cent, until September 1, 1953, on other intrastate rates and charges. Among other things, the order required the company to "file with this Commission a complete report covering its entire operations in Tennessee for the twelve months' period from July 1, 1952, to June 30, 1953." This order and the higher rates authorized thereunder are still in effect. The company's present application is designed to raise permanently the current level of these higher rates in the amount of approximately \$5,000,000 on an annual basis.

II. Southern Bell Telephone and Telegraph Company and Its Intercorporate Relations

The Southern Bell Telephone and Telegraph Company is a corporation organized under the laws of the state of New York, and duly authorized to do business in the state of Tennessee. It provides local exchange telephone service and both intrastate and interstate toll service in the state of Tennessee and in 8 other southeastern states: Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, and South Carolina.

As of June 30, 1952, the company served a total of 614,298 telephone stations within the state of Tennessee.

Southern Bell is one of the largest telephone operating companies in the Bell System. At June 30, 1952, its system-wide telephone plant in service amounted to \$1,021,194,704. At that date, it had two classes of securities outstanding: \$615,000,000 in capital common stock, all owned by the American Telephone and Telegraph Company, and \$180,000,000 in debenture bonds owned by the public.

The American Telephone and Telegraph Company owns all or a majority of the voting stock in 19 telephone operating companies as well as a minority interest in 2 other operating companies, all of which comprise the Bell System in the United States. It also owns a minority interest in The Bell Telephone Company of Canada. In addition, the American Company owns 99.81 per cent of the voting stock of Western Electric Company, Inc., and 50 per cent of the stock of Bell Telephone Laboratories, Inc. (the other 50 per cent is owned by Western Electric Company, Inc.). The Western Electric Company manufactures, purchases, and distributes most of the apparatus, equipment, and supplies required by the Bell System, while the Bell Telephone Laboratories performs research, development, and design work for the System.

There are 2 principal departments in the American Company: the Long Lines Department, which operates long-distance interstate lines, and the General Department, which provides various services to the Bell System operating companies under so-called License Contracts. In return for these

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services under the License Contracts, each operating company, including Southern Bell, is obligated to pay a fee of one per cent of all local and toll service revenues, less uncollectibles.

III. *Analysis of Company's Proof*

(a) *Test Year*

It would be appropriate here to dispose of Southern Bell's motion at the hearing on February 16, 1953, whereby the company sought in effect to change its test year and pertinent proof from the period covered by its original case-in-chief, namely, the twelve months ending June 30, 1952, to the calendar year 1952. Counsel for the Commission opposed this motion on the grounds that, if granted, it would effectually present a completely new case-in-chief; that it would render obsolete the staff's work during the several preceding months, which involved considerable effort and expense, in preparing to rebut the utility's original proof; and that at least three additional months, with attendant expense and effort, would be required by the staff to study the company's new proofs and prepare a new rebuttal.

We cannot grant the company's motion. To do so would be to subvert the orderly and expeditious determination of utility rate cases. The implications of the motion are too obvious to merit further comment. In reaching this decision, we are not unmindful of the testimony of witness Groce, an assistant vice president of the company. At the hearing, he stated unequivocally that the twelve months ending June 30, 1952, would "provide suitable data for consideration in deter-

mining current earnings and for establishing future rates in Tennessee," and that "this twelve-months' period is representative under prevailing economic conditions. It includes the full effect of the higher wage rates which became effective in June, 1952, and of the currently applicable tax rates and depreciation accrual rates. . . . When appropriately adjusted . . . to give full consideration to the authorized subscriber rates (effective February 1, 1952), prevailing cost factors, and other known conditions, it provides an adequate and reasonable period for use in determining the Tennessee intrastate operating results and additional earnings required."

(b) *Current Cost Value of Property*

[1] Southern Bell offered some proofs purporting to show the "current cost" value of its intrastate property as of June 30, 1952. In brief, it constitutes an attempt to estimate the reproduction cost of old property at present-day prices of material and labor. Such proof is highly conjectural, speculative, and unrealistic. The company would hardly think of replacing its old facilities with precise counterparts, or at their original locations. Technological progress and the growth of the industry have rendered obsolescent a substantial portion of these facilities. While present-day replacements may be somewhat more costly to install, they are more efficient and economical in operation.

Sections 5450 and 5451 of the Tennessee Code, which underlie our consideration of this issue, empower this Commission to fix "just and reasonable" rates. We have no statutory duty to base our determination on the

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"current cost" value of a utility's property. Nor are we under a constitutional obligation to do so. This question has been settled by the United States Supreme Court in *Federal Power Commission v. Hope Nat. Gas Co.* (1944) 320 US 591, 88 L ed 333, 345, 51 PUR NS 193, 200, 64 S Ct 281: "Under the statutory standard of 'just and reasonable,' it is the result reached, not the method employed, which is controlling." To the same effect: *Fort Smith v. Southwestern Bell Teleph. Co.* (1952) — Ark —, 94 PUR NS 214, 247 SW2d 474; *Re New Jersey Power & Light Co.* (1952) 9 NJ 498, 95 PUR NS 467, 89 A2d 26; *Southwestern Bell Teleph. Co. v. State* (1951) 204 Okla 225, 89 PUR NS 311, 230 P2d 260; *Jacksonville Gas Corp. v. Railroad & Public Utilities Commission* (1951) — Fla —, 88 PUR NS 420, 50 So2d 887; *New England Teleph. & Teleg. Co. v. State* (1949) 95 NH 353, 78 PUR NS 67, 64 A2d 9.

(c) *Alleged Net Average Investment and Return*

[2, 3] Applicant offered the following details of its net average investment in property devoted to Tennessee intrastate telephone service:

	Average
Telephone Plant in Service	\$115,199,975
Telephone Plant under Construction	1,022,187
Property Held for Future Telephone Use	67,298
Telephone Plant Acquisition Adjustment	52,653
Materials and Supplies	1,506,286
Cash Requirements	288,460
 Total Gross Investment	 \$118,136,859
Depreciation Reserve	24,328,945
 Net Investment	 \$93,807,914

The company also submitted the following computation of its net operating income for the test year, after giving full effect to the June, 1952, wage increase and other cost and revenue factors:

Operating Revenues (after all adjustments)	\$44,244,207
Operating Expenses (after all adjustments)	39,591,631
 Net Operating Income	 \$4,652,576

The resultant rate of return admittedly earned by applicant during the test year, after all alleged adjustments, would appear to be 4.96 per cent.

Assuming, without conceding, the validity of the company's averment that, on a net-average-investment rate base, its existing intrastate rates in Tennessee would yield a return of 4.96 per cent during the test year, after all adjustments, we are confronted with the question of whether such a return is *per se* unjust and unreasonable. The well-established judicial answer appears to be that the propriety of any rate of return must be examined in the light of all relevant facts and circumstances. In *Bluefield Water Works & Improv. Co. v. West Virginia Pub. Service Commission*, 262 US 679, 692, 693, 67 L ed 1176, PUR 1923D 11, 20, 43 S Ct 675, the United States Supreme Court has enunciated the rule:

"What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for

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the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally."

See also: *Safe Harbor Water Power Corp. v. Federal Power Commission* (CA3d 1949) 84 PUR NS 344, 179 F2d 179 (certiorari denied by the United States Supreme Court [1950] in 339 US 957, 94 L ed 1368, 70 S Ct 980). "A Telephone Rate Case" (1941) by Edward D. Smith, former vice president and general counsel of Southern Bell Telephone and Telegraph Company, at p. 98.

Applicant's affiliation with the Bell System also is a pertinent factor in assessing the propriety of its alleged rate of return during the test year. In "A Telephone Rate Case," *supra*, the author succinctly expresses the judicial view (p. 100):

"It is likewise true that if the circumstances are such as to minimize the risks of operation of a public service corporation, as for instance, if such

corporation . . . be an affiliate of a very strong system, a fair and non-confiscatory return for it would be less than one to which it might otherwise be entitled."

See also: *Wabash Valley Electric Co. v. Young*, 287 US 488, 501, 77 L ed 447, PUR1933A 433, 53 S Ct 234.

(d) *Effect of Capital Structure on Company's Rate of Return*

[4] In the *Bluefield Water Works Case*, *supra*, the United States Supreme Court prescribed the basis for determining the adequacy of a utility's rate of return, namely, "under efficient and economical management." As capital structure is a function of management, it is proper here to explore this fundamental requirement with respect to Southern Bell's capital structure. Witness Duncan, an official of the company, testified that a debt ratio of 33½ per cent is "sound," and that it is the policy of the Bell System to achieve such a relation between its debt capital and its total capitalization. The record shows, however, that the company's debt ratio has declined steadily during the past five years: from 33.2 per cent in 1948 to 20.8 per cent at the end of 1952. Under the License Contract, the American Telephone and Telegraph Company is obligated to provide the "necessary financial support and assistance" for Southern Bell's capital needs. By providing such support through investments in its subsidiary's common stock instead of bonds, the American Company derives a 4 to 5 times greater net return for its own stockholders. While equity financing may be meritorious if kept within the zone of rea-

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sonableness, it becomes prejudicial to the ratepayers when continued beyond this area.

Under present Federal tax laws, dividends paid on a utility's common stock are not deductible for income tax purposes; interest paid on its bonded indebtedness, however, is deductible. As a result, any increase in Southern Bell's debt ratio would reduce its income tax liability and correspondingly augment its net operating income. Manifestly, a higher debt ratio would minimize the company's need for higher rates.

This Commission can exercise no authority over the affairs of the American Telephone and Telegraph Company. Under the law, our jurisdiction is restricted to the intrastate operations of Southern Bell within the state of Tennessee. However, we are not oblivious of the fact that the American Company's ownership of 100 per cent of Southern Bell's common stock enables it to assert complete dominion over its subsidiary. We recognize that both companies are not dealing with each other at arm's length. In such a situation, the United States Supreme Court has repeatedly cautioned that the opportunity exists for one member of the combination to seek an unfair advantage over the other, and that their transactions must be closely scrutinized to properly safeguard the public interest. *Smith v. Illinois Bell Teleph. Co.* (1930) 282 US 133, 144, 75 L ed 255, PUR 1931A 1, 51 S Ct 65; *Western Distributing Co. v. Kansas Pub. Service Commission*, 285 US 119, 124, 76 L ed 655, PUR1932B 236, 52 S Ct 283; *Dayton Power & Light Co. v. Ohio Pub. Utilities Commission* (1934)

292 US 290, 308, 78 L ed 1267, 3 PUR NS 279, 54 S Ct 647. The findings and conclusion of the Michigan supreme court, in *People ex rel. Potter v. Michigan Bell Teleph. Co.*, 246 Mich 198, PUR1929B 455, 457-460, 224 NW 438, are compelling and regarded with favor by us.

"The Michigan (Bell Telephone) Company is not conducting and carrying on telephone business in Michigan; the American (Telephone and Telegraph) Company is doing it. The board of directors of the Michigan Company does not manage the property and affairs of the company; that is done by the American Company. The American Company owns 99.99 per cent of the common stock of the Michigan Company. Nearly 70 (qualifying) shares are held by certain directors. . . . Witnesses, officers of both the Michigan and the American Company, testified of conclusion that there was no domination of the Michigan Company. The record does not support the conclusion. . . . A review of all the evidence is convincing that in the Bell System the Michigan Company is merely an operating unit, . . . to achieve standardization in method, practice, materials, and equipment, (which) are most minutely defined and are as minutely followed.

"The Michigan Company is no more engaged in conducting and carrying on a telephone business than is the ordinary station agent engaged in conducting and carrying on the railroad business of his employer. The agent must use reason and intelligence, and has a certain discretion; but it would be remarkable were his 'lines' as closely defined as are those of the Michigan Company."

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"That the Michigan Company is a mere agent or instrumentality of the American Company is established. We think that it is also apparent that a purpose of the separate entity is to avoid full investigation and control by the Public Utilities Commission of the state to the injury of the public."

In the instant record, while we have the highest regard for the integrity and competency of the company's managerial and operating personnel in the state of Tennessee, the evidence is persuasive that Southern Bell's capital structure has been dictated by the American Telephone and Telegraph Company for the prime benefit of the American Company's stockholders, and that it is prejudicial to the rate-payers in Tennessee. In the *Hope Case*, *supra* ([1944] 320 US 591, 603, 88 L ed 333, 51 PUR NS 193, 200, 64 S Ct 281), the United States Supreme Court said that "the fixing of 'just and reasonable' rates involves a balancing of the investor and the consumer interests." This Commission would be unable to achieve such an equitable "balancing" of interests if we were forced to accept, for rate-making purposes, any capital structure which the American Company chose to impose on its subsidiary. The question has received profound consideration by other rate-making authorities. In *Chesapeake & P. Teleph. Co. v. Public Service Commission* (1952) — Md —, 97 PUR NS 50, 62, 93 A2d 249, the Maryland court of appeals affirmed the action of the regulatory body in reconstructing the utility's capital structure on the basis of a 45 per cent debt ratio. The court there cited with approval the following conclusion of

the Maryland Commission (1952) 93 PUR NS 215, 239:

"While having no power to direct the issuance of bonds instead of stock, we can say that the consumer should not be required to pay more than he would have to pay if the company had availed itself of an appropriate debt-equity capital structure. So, this Commission must take note of the fact that the company has no debt capital, but rather issues equity holdings to American (Telephone and Telegraph Company) which, in turn, creates its own debt capital, thereby permitting American to make a tax saving which would inure to the benefit of the (Maryland) company, if it issued its bonds instead of equity capital."

The Vermont supreme court, in *Re New England Teleph. & Teleg. Co.* (1951) 116 Vt 480, 90 PUR NS 414, 430, 431, 80 A2d 671, elaborated the rule of law in upholding the power of the state Commission to reconstruct the utility's prevailing capital structure on the basis of a 45 per cent debt ratio in a rate proceeding:

"While recognizing that rate-making proceedings should be designed to enable the company to achieve a capital structure which is balanced and elastic, . . . the Commission conceives it to be the duty of the company, as a public service enterprise, to adopt the most economical methods of financing, . . . that recognition of these principles does not compel it to submit to the extravagant requests of a utility for equity capital under market conditions which do not justify its exclusive use as a means of fulfilling the company's financial requirements, and that the maintenance of a low debt ratio should be compatible with the

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interest of the ratepayer as well as that of the investor. The Commission finds that a present debt ratio of 45 per cent would be entirely consonant with the economic well being of the company, and states, 83 PUR NS at pp. 459, 460:

"'. . . For the computation of the cost of money, we, therefore, accept the debt ratio of 45 per cent as proper after examination of comparative debt ratios in other utility industries, consideration of the relative stability of net telephone earnings, and the nature and quantity of the petitioner's telephone plant in general. We feel that the proper balance in this respect is 45-55 per cent ratio of debt to equity rather than the 33½ per cent to 66½ per cent ratio which has been the historical yardstick of the Bell System, in times when market conditions and income tax requirements were considerably less demanding.' (Italics ours.)

"The principal contention in opposition to the decision of the Commission is that debt ratio is a matter for the exclusive determination of management. The answer to this is aptly put in the recent case of New England Teleph. & Teleg. Co. v. Department of Public Utilities (1951) 327 Mass 81, 88 PUR NS 73, 79, 80, 97 NE2d 509, 514, as follows:

"'. . . This company is in effect seeking additional capital and higher rates in order to obtain and support such additional capital. Debt ratio substantially affects the manner and cost of obtaining new capital. It seems to us that to say the Department (of Public Utilities) could not even consider debt ratio would be to blind its eyes to one of the elements

in the problem before it. From the standpoint of the company, it might be better to have no debt capital at all. An honest board of directors might think so and at least from the standpoint of loyalty to the company's interests it would be difficult to say that they had abused their discretion. Yet the evidence shows that such a decision under present conditions might well double or even triple the cost of new capital and increase correspondingly the burden laid upon the public for obtaining it. Surely, the Department could give consideration to this matter.'"

In the cited case of New England Teleph. & Teleg. Co. v. Department of Public Utilities (1951) 327 Mass 81, 88 PUR NS 73, 97 NE2d 509, the Massachusetts supreme judicial court approved an order of the state regulatory Commission in which a debt ratio of 45 per cent was adopted for rate-making purposes.

Southern Bell's witness Duncan testified that, from 1946 through 1951, the Bell System debt ratio averaged 45.9 per cent. The record shows that, during the years 1941 through 1951, the composite debt ratios of the electric utilities in the United States rose from 46.9 per cent to 49.2 per cent at December 31, 1951, and that the composite debt ratios of the natural gas companies advanced from 35.9 per cent to 56.8 per cent. Also that, of all new utility securities issued in 1952, 63.6 per cent comprised long-term debt in the electric industry, and 73.8 per cent represented long-term debt in the natural gas industry.

During the test year, Southern Bell's actual debt ratio averaged only 23.8 per cent. Such a low debt ratio is

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not conducive to the public interest. This Commission is of the opinion that the adoption of a 45 per cent debt ratio in the instant proceeding is amply supported by the record. We believe that by adopting such a debt ratio we can achieve a proper "balancing of the investor and the consumer interests." The laws of this state empower us to do this. Section 5458 of the Tennessee Code provides that, in fixing just and reasonable rates, the statute "shall be given a liberal construction, and any doubt as to the existence or extent of a power conferred by this statute . . . on the Commission shall be resolved in favor of the existence of the power, to the end that the Commission may effectively govern and control the public utilities placed under its jurisdiction by this statute."

In considering the effect of a 45 per cent debt ratio on the company's alleged rate of return during the test year, we think it appropriate to examine two sets of computations submitted by the Commission staff. In one set, the company's system-wide debt cap-

ital was estimated at \$340,000,000, with an interest rate of 2.82 per cent (the present actual composite rate for all outstanding debenture bonds), and its earned surplus at \$20,000,000. The second set was prepared to embrace the company's claims (1) that the staff's estimate of average debt capital during the test year be increased to \$351,000,000, to cover \$11,000,000 in alleged temporary advances by the American Company to Southern Bell; (2) that the average interest rate be raised to 3.25 per cent; and (3) that the earned surplus be enlarged to \$20,800,000. For reasons which will become apparent hereinafter, we do not deem it necessary or decisive in this issue to resolve the differences between the two sets of computations. For the purpose of our examination, therefore, we have placed both sets on an equal footing. The following summary shows the effect on the company alleged rate of return of reconstructing its prevailing capital structure on the basis of a 45 per cent debt ratio:

	Prevailing Capitalization	Debt Ratio 45%	Debt Ratio 45%
System	Interest Rate 2.82%	Interest Rate 2.82%	Interest Rate 3.25%
Debt Capital	\$180,000,000	\$340,000,000	\$351,000,000
Equity Capital	557,917,000	397,917,000	397,917,000
Surplus	20,000,000	20,000,000	20,800,000
Cap. & Surplus	<u>\$757,917,000</u>	<u>\$757,917,000</u>	<u>\$769,717,000</u>
Intrastate			
Net Oper. Income*	\$4,652,576	\$4,927,576	\$5,039,476
Net Ave. Investment	93,807,914	93,807,914	93,807,914
Rate of Return	4.96%	5.26%	5.37%

* After adjustment for Federal income tax of 52%, as per company books.

Thus, by reconstructing the prevailing capital structure on the basis of a 45 per cent debt ratio, the company's

alleged rate of return of 4.96 per cent is increased to a range between 5.26 per cent and 5.37 per cent.

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(e) *Telephone Plant under Construction*

[5] Southern Bell's net average investment during the test year includes "Telephone Plant under Construction" in the amount of \$1,022,187. We believe that the inclusion of this item in the rate base is in conflict with sound rate-making principles. In the first place, under the Uniform System of Accounts for Class A and Class B Telephone Companies as prescribed by the Federal Communications Commission, § 31.100:2, relating to Telephone Plant under Construction, provides:

"This account shall include the original cost of construction of telephone plant not completed ready for service at the date of the balance sheet. It shall include interest during construction, taxes during construction, and all other elements of cost of such construction work."

When this construction work is completed and the new plant placed in service, the total cost thereof, including interest, taxes, and other overheads during the construction period, is capitalized. Manifestly, the company suffers no injustice by the exclusion of Telephone Plant under Construction from the rate base. Secondly, the records show that a substantial portion of the plant under construction is intended for new customers and for upgrading existing service. At June 30, 1952, the company held 24,161 un-filled applications for new service in Tennessee and 51,007 un-filled applications for upgrades. When and as these orders are completed, they produce additional revenue. If, therefore, we were to include this construction work in the rate base upon which the company is seeking a fair return,

equity would require us to include also, as a balancing factor, the estimated additional revenue from such construction. Otherwise, the present subscribers would be forced to pay a return on property constructed for future subscribers, with the result that, when these future customers begin to receive service, the company would enjoy a double return. Southern Bell has offered no estimate of its anticipated revenue from these future subscribers or the upgraded service. Finally, the company's proffer to credit the revenue account with the amount of interest during construction falls short of curing the infirmity. Arnold H. Hirsch, witness for the Commission staff, testified that, on the basis of elementary principles of rate making, such a scheme would prejudice the telephone subscribers by approximately \$120,000 during the test year.

Many authorities support the exclusion of Telephone Plant under Construction from a utility's rate base in a rate proceeding: *Citizens Teleph. Co. v. Public Service Commission* (1952) — Ky —, 94 PUR NS 383, 247 SW 2d 510; *Southwestern Bell Teleph. Co. v. State* (1951) 204 Okla 225, 89 PUR NS 311, 230 P2d 260; *Re New England Teleph. & Teleg. Co.* (1951) 116 Vt 480, 90 PUR NS 414, 80 A2d 671; *New England Teleph. & Teleg. Co. v. State* (1949) 95 NH 353, 78 PUR NS 67, 64 A2d 9.

(f) *Working Capital: Materials and Supplies and Cash Requirements*

[6] Among other items included in Southern Bell's net average investment during the test year are "Materials and Supplies" (\$1,506,286)

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and "Cash Requirements" (\$288,-460), both of which total \$1,794,746. Under ordinary circumstances, this Commission recognizes working capital (Materials and Supplies and Cash Requirements) as a proper component of the rate base upon which a utility is entitled to a fair return. But where, as here, such practice would result in an obvious injustice to the ratepayers, we must be guided by principles of equity.

The record shows that Southern Bell accrues a substantial sum of money for Federal income taxes and other purposes considerably in advance of disbursement time. The telephone subscribers contribute this money through their monthly bills, and the company enjoys the benefit thereof in its business. During the test year, there was available to the company for use in its business an average monthly balance in accruals of \$3,550,000 for Federal income taxes, in addition to approximately \$2,000,000 collected in advance for gross receipts, ad valorem, and other taxes payable about one year later. It is apparent that the subscribers have thus made an advance contribution of more than twice the company's alleged requirements for working capital. As a consequence, if these subscribers were obliged to pay a return on this working capital, it would be tantamount to a return on funds which they have themselves supplied. And it would constitute unjust enrichment to the company. In the instant circumstances, we do not think it equitable to allow any portion of the alleged working capital requirements in the rate base.

Our search of the authorities dis-
100 PUR NS

closes a number of jurisdictions where tax accruals by utilities have been used to offset, in whole or in part, their claimed requirements or working capital in rate proceedings. The principle has received judicial approval. Chesapeake & P. Teleph. Co. v. Public Service Commission (1952) — Md —, 97 PUR NS 50, 93 A2d 249; Pittsburgh v. Public Utility Commission (1952) 370 Pa 305, 94 PUR NS 353, 88 A2d 59.

(g) *Service Pension Accruals*

[7] The staff submitted details of Southern Bell's system-wide Pension Trust Fund for the years 1946 through 1952. During each of these years, the interest revenue and other income from the balance in the fund exceeded the disbursements for pensions. The following summary for the years 1951 and 1952 appears significant:

	1951	1952
Payments by Company	\$10,424,406	\$12,066,855
Interest Revenue, etc.	\$1,835,340	\$2,198,623
Disbursements for Pensions	1,538,522	1,759,245
Excess of Interest Revenue, etc.	\$296,818	\$439,378
Per Cent Excess	19.3%	25.0%

It will be noted that the excess of interest revenue and other income over the disbursements for pensions increased substantially in 1952 over 1951, both dollarwise and percentagewise. Omitting undue refinements, it would seem that, if the company had made no payments to the fund in 1952 (instead of \$12,066,855), the earnings from the balance in the fund in 1951 would have totalled at least \$3,-

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670,680 (\$1,835,340 x 2) for the two years, or \$372,913 more than the corresponding pension disbursements of \$3,297,767. The indications are compelling that the current pension accruals are excessive. Other evidence in the record tends to reinforce this conclusion. In a sworn statement filed with the Securities and Exchange Commission in Washington, D. C., on August 20, 1952, the American Telephone and Telegraph Company expressly admitted that the pension trust funds of its subsidiaries "are more than adequate to meet future service pension payments for those now on the pension rolls and those who are now entitled to return on pensions at their own request under the Plan for Employees' Pensions." The same admission appears in the American Company's annual stockholder reports for the years 1951 and 1952. And more recently, in response to our request at the final hearing in this proceeding, Southern Bell's witness Stevenson (senior actuary of the American Telephone and Telegraph Company) filed an exhibit with this Commission on April 6, 1953, showing that, if the current pension accruals are reduced by 50 per cent, "it is estimated that in 1973 the service pension payments would first exceed the sum of the said reduced accrual and the earnings on the fund resulting from such a program."

This Commission fully recognizes the desirability of pension accruals and the desirability of preserving the integrity of the company's trust fund. These accruals, however, constitute an operating expense which is charged against the telephone subscribers. It is incumbent on us, therefore, to treat

the pension accruals, however laudable their purpose, as any other expense account, and to assess the reasonableness of the amount thereof on the basis of the proofs in the record.

Under § 5451 of the Tennessee Code, every public utility which seeks a rate increase has the burden of proof to establish its justification. The utility must submit substantial evidence to show not only the amounts in its various accounts but also their reasonableness. In *New England Teleph. & Teleg. Co. v. State* (1949) 95 NH 353, 78 PUR NS 67, 78, 64 A2d 9, the New Hampshire supreme court appropriately said: "[The] mere actuality of expense does not establish its reasonableness, . . . propriety or necessity."

The applicable rule is stated by the New Jersey supreme court in *Re Public Service Coordinated Transport* (1950) 5 NJ 196, 86 PUR NS 161, 175, 178, 74 A2d 580:

"It must be emphasized that rate making is not an adversary proceeding in which the applying party needs only to present a *prima facie* case in order to be entitled to relief. There must be proof in the record not only as to the amount of the various accounts but also sufficient evidence from which the reasonableness of the accounts can be determined. . . . A utility in a rate proceeding must bear the burden not only of proving the amount of its operating and other expenses, but also the burden of proving the basis of the charges to its expense accounts and the propriety of including such charges for rate-making purposes."

In the case of *Pittsburgh v. Public Utility Commission* (1952) 370 Pa

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305, 94 PUR NS 353, 364, 88 A2d 59, involving, among other things, the propriety of the pension accruals by the Bell Telephone Company of Pennsylvania, the Pennsylvania supreme court expressed a pertinent view:

"We do not intend by our conclusion . . . to in any manner foreclose the Commission from finding in any rate case an excessive charge to operating expenses due to an overaccrual of a pension fund. If competent evidence of an overaccrual is presented to the Commission and the Commission is persuaded by such evidence, there should be no hesitation in so finding."

The determination of pension accruals is not an exact mathematical science. It involves so many variables that the soundness of any actuarial theories must be tested by end results. Measured by this standard, we are unable to find any substantial proof in the record to show the reasonableness of Southern Bell's current pension accruals. On the contrary, we find persuasive evidence that these accruals are excessive and can be substantially reduced with no harmful results to the purpose and integrity of the Pension Trust Fund.

(h) *Total Effect of Adjustments on Company's Alleged Rate of Return*

The following summary shows the total effect on Southern Bell's alleged rate of return resulting from the elimination of Telephone Plant under Construction, Materials and Supplies, and Cash Requirements from the rate base, and of 50 per cent of the service pension accruals from the operating expenses during the test year. It is based on the capital structures and

debt interest rates discussed hereinabove under section III(d).

	Debt Ratio 45% Interest Rate System Capital & Surplus	Debt Ratio 45% Interest Rate Intrastate (Adjusted) Net Operating In- come	Debt Ratio 3.25% Interest Rate \$769,717,000
Capital & Surplus	\$757,917,000		
Net Average In- vestment	90,990,981	90,990,981	
Rate of Return	5.72%	5.83%	

IV. *Company's Earnings Requirement*

[8] In the final analysis, the rates of any public utility must be sufficient to cover all necessary operating expenses, including depreciation and taxes, in addition to interest on the debt, reasonable dividends and a margin for surplus. This is the ultimate test of the adequacy of any rate of return. In *Federal Power Commission v. Hope Nat. Gas Co.* (1944) 320 US 591, 88 L ed 333, 345, 51 PUR NS 193, 200, 64 S Ct 281, the United States Supreme Court prescribed the criterion:

"Under the statutory standard of 'just and reasonable,' it is the result reached, not the method employed, which is controlling. . . . It is not theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust or unreasonable, judicial inquiry . . . is at an end. The fact that the method employed to reach that result may contain infirmities is not then important. . . . And he who would upset the rate order . . . carries the heavy burden of making a convincing showing that it is invalid

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because it is unjust and unreasonable in its consequences. . . . The rate-making process . . . , i.e., the fixing of 'just and reasonable' rates, involves a balancing of the investor and the consumer interests. . . . From the investor or company point of view, it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. . . . By that standard, the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks."

Counsel for Southern Bell seems to have urged the "total effect" doctrine of the Hope Case, *supra*, when he asserted the supremacy of the company's earnings requirement in the instant proceeding:

"Basically, it is our earnings requirement in each state that has determined the nature of our petitions now pending before the Commissions in the States in which we operate."

[9] In order to properly compute the company's earnings requirement during the test year, it is necessary for us to determine a fair and equitable dividend rate for the common stock. As Southern Bell's common stock is all owned by the American Telephone and Telegraph Company, we are denied the opportunity to determine its real value in the competitive market. Moreover, the American Company's ownership of the equity securities of virtually every other large telephone utility in the country forecloses the telephone industry as a reliable source of information. We are obliged to look elsewhere for

the investor's appraisal of reasonably comparable securities in the open market. The natural gas and the electric utility industries appear as our proper recourse.

The record shows that, in the natural gas industry, the current average yield on the common stocks of 22 so-called "integrated" companies is 4.7 per cent, and the average yield on the common stocks of 22 "retail distributors" is 5.2 per cent. Our consideration of these yields must be tempered by the relative newness of this industry and the probable speculative character of the equity securities, as well as by the fact that there is not a single operating utility of the financial stature of Southern Bell, a billion dollar company.

From the standpoint of the investor, the electric utility industry would seem to be reasonably comparable to the telephone industry, particularly with respect to the important element of risk. Under normal economic conditions, the telephone industry is practically secure in its financial integrity. In the event of adverse economic conditions, while some subscribers might seek to downgrade their service in order to reduce expenses, the probability of their discontinuing service entirely appears remote. The telephone has become an indispensable part of our social and economic life. In the electric utility industry, however, the risk factor is more complex. In times of economic distress, some residential consumers would undoubtedly curtail their use of electricity. But such curtailment would constitute only a small fraction of the losses to the utilities resulting from the heavy shrinkage of commercial and industrial usage. It

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is common knowledge that the largest users of electricity today are the commercial and industrial customers. During 1951, these customers purchased a total of 68 per cent of the energy sold to all classes of electric consumers. Moreover, even in normal times, the electric utilities are constantly threatened with the loss of business. In the home, where the three major revenue-producing appliances are the cooking stove, the mechanical refrigerator and the automatic water heater, the gas industry poses a vigorous threat. And in the manufacturing industries, with growing mechanization and the higher cost of electric power, owners have been alert to the possible economy of generating their own electricity. Some of the leading industrial enterprises in the United States operate their own power plants for reasons of economy. Finally, the potential threat of government ownership is a matter of concern to the investor in the equity securities of electric utilities. In the light of all circumstances, it would seem that the prudent investor would prefer to invest his money in the common stock of the telephone industry and to accept a lower yield than he might demand in the electric utility industry. For the purpose of this proceeding, we think it fair and reasonable to both industries with respect to the element of risk.

The record shows that the average yields of first quality common stocks in the electric utility industry have de-

clined during the past two years; from an average of 5.8 per cent at the beginning of 1951 to 4.98 per cent at the end of 1952; that the current yields on the common stocks of the three largest electric utilities in the country—each in the billion dollar class—are precisely the same; 5.1 per cent; and that the average yield on the common stocks of the ten leading electric operating companies is 5.29 per cent. We believe that, if Southern Bell's common stock were available on the open market today, it would rank easily with the finest electric utility equity securities and command a price to yield about 5 per cent. While this evidence would seem to warrant a dividend rate of not more than 5.25 per cent or 5.5 per cent in our consideration of the company's earnings requirement, the character of this proceeding prompts us to adopt a dividend rate of 6 per cent.

In view of the decisiveness of the "total effect" doctrine as enunciated in the *Hope Case*, *supra*, this Commission has chosen to test the adequacy of the existing telephone rates in Tennessee by giving full effect to Telephone Plant under Construction, Materials and Supplies, Cash Requirements, and pension accruals, as claimed by the company. The following summary, therefore, embraces these items in their entirety. It should be observed that this summary is predicated on the capital structures and debt interest rates referred to previously under section III(d).

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System	Capital and Surplus	Debt Ratio 45% Interest Rate 2.82%	Debt Ratio 45% Interest Rate 3.25%
Intrastate			
Net Operating Income	\$4,927,576	\$5,039,476	
Earnings Requirement	4,060,000	4,280,600	
Available for Surplus	\$867,576	\$758,876	
Total Available for Common Stock Dividends	\$3,807,576	\$3,704,476	
Common Stock Dividends @ 6%	2,800,000	2,800,000	
Dividend Payout Ratio	73.5%	75.5%	

It is thus apparent that the present intrastate telephone rates in Tennessee produce sufficient revenues not only to pay the company's intrastate portion of operating expenses, interest on the debt, and reasonable dividends on the common stock, but also to provide a substantial balance for surplus—ranging from \$758,876 to \$867,576. This conclusion is underlined by the conservative dividend payout ratios shown in the above summary—between 73.5 per cent and 75.5 per cent—when compared with the current dividend payouts of 77.7 per cent to 87 per cent for the three largest electric utilities in the country and the average of the ten leading electric companies.

V. Summation of Findings

On the basis of the evidence in the record and for the reasons set forth hereinabove, this Commission makes the following findings:

1. Southern Bell's operating results, as adjusted, during the twelve months ending June 30, 1952, provide

a reasonable basis for determining the propriety of the rate increase sought in the instant application.

2. The company's proofs purporting to show the "current cost" value of its intrastate property in Tennessee are conjectural, speculative, and unrealistic. We can give no weight to such evidence in this proceeding.

3. For the purpose of this proceeding, we adopt the company's alleged net average investment of \$93,807,914 in intrastate property during the test year, except for the items of Telephone Plant under Construction, Materials and Supplies, and Cash Requirements.

4. For the purpose of this proceeding, we adopt also the company's alleged intrastate net operating income of \$4,652,576 (after adjustments) during the test year, subject to our disallowance of 50 per cent of alleged pension accruals and of credit for interest during construction.

5. For the purpose of determining the propriety of the proposed rate increase, the company's prevailing capital structure should be reconstructed on the basis of a 45 per cent debt ratio.

6. On the basis of a capital structure with a 45 per cent debt ratio, the company's rate of return during the test year, predicated on a net average investment of \$93,807,914, would range between 5.26 per cent and 5.37 per cent. This is *before* giving any effect to the elimination of Telephone Plant under Construction, Materials and Supplies, Cash Requirements, or 50 per cent of alleged service pension accruals.

7. On the basis of a capital structure with a 45 per cent debt ratio, the company's rate of return during the

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test year, predicated on an adjusted net average investment of \$90,990, 981, would range between 5.72 per cent and 5.83 per cent. This is *after* giving effect to elimination of Telephone Plant under Construction, Materials and Supplies, Cash Requirements, and 50 per cent of alleged service pension accruals.

8. Tested by our best judgment of earnings requirement, with a debt ratio of 45 per cent and giving full effect to the items of Telephone Plant under Construction, Materials and Supplies, Cash Requirements, and pension accruals, the present intrastate rates in Tennessee produce sufficient revenues to cover the company's intrastate portion of operating expenses, interest on the debt, and reasonable dividends on the common stock, as well as to provide an adequate balance for surplus.

9. There is no warrant for a rate increase in Tennessee at the present time, even if we allow in full the company's claims for Telephone Plant under Construction, Materials and Supplies, Cash Requirements, and service pension accruals.

10. Southern Bell has failed to meet the burden of proof as required by § 5451 of the Tennessee Code.

ORDER

It is, therefore, *ordered* by the Commission:

1. That the motion by counsel for Southern Bell Telephone and Telegraph Company at the hearing on February 16, 1953, designed in effect

to change the test year from the period originally chosen by it, namely, the twelve months ending June 30, 1952, to the calendar year 1952, is hereby dismissed.

2. That the application of Southern Bell Telephone and Telegraph Company, filed on August 15, 1952, for a revision and increase of the Tennessee intrastate rates and charges, is hereby denied.

3. That the rates and charges authorized by the Commission by its order of January 31, 1952, in Docket No. U-3177, 93 PUR NS 12, and now in effect on a temporary basis, shall become the fixed and permanent rates to be charged by Southern Bell Telephone and Telegraph Company in Tennessee.

4. That all other provisions of the Commission's order of January 31, 1952, in Docket No. U-3177, *supra*, be considered as having been fully met and said docket is hereby closed.

5. That Docket No. U-3314 shall remain open for such further and future action as may become necessary.

Statement of Commissioner Pentecost

PENTECOST, Commissioner, concurring: Although I did not participate in the hearing in Docket No. U-3314, I have read and studied the record made in that cause. From a study of the record I concur with my colleagues in their findings of fact, conclusions of law, and in the opinion generally.

MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

Re Granby Telephone & Telegraph
Company

D.P.U. 10512
July 14, 1953

APPPLICATION by telephone company for rate increase; increase denied.

Rates, § 150 — Inefficiency — Failure to modernize.

A telephone company which has failed to take advantage of an available loan to modernize and extend its plant and thereby obtain a substantial and adequate profit under present rates should not be allowed a rate increase, since, if rates are increased, the company might still fail to improve its plant and service or, if the rehabilitation program is carried out, the return would be excessive because of the more efficient operation.

Rates, § 553 — Telephone — Classes of service — Service value and cost.

Statement that a telephone company will not be permitted to charge a 4-party residence user within the base rate area less than a rural line subscriber in the absence of concrete evidence of costs, such as a showing that the relative investment and maintenance costs per customer are higher on long multiparty lines, even though the value of the service is less, p. 53.

APPEARANCES: Alston D. Mugnier, President, for Granby Telephone & Telegraph Company; Edward N. Gadsby, Counsel, for the Department.

By the **DEPARTMENT:** Granby Telephone and Telegraph Company of Massachusetts filed on April 29, 1953, its Revised Sheet No. 7, § 1, of M.D.P.U. No. 3, to become effective June 1, 1953, which provided for general increases in its rates for local telephone service. The application of the increased rates was suspended by

order of the Department, and a public hearing held in Granby on May 19, 1953, in connection with the investigation thereby instituted.

This is the third rate case involving this company to come before us in the last four years. See *Re Granby Teleph. & Teleg. Co.* D.P.U. 8615, dated June 23, 1949, and D.P.U. 9741, dated January 17, 1952. Condensed comparative balance sheets, as modified to include the appraised value of certain property placed in service prior to 1948, appears as follows:

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	ASSETS	
	12/31/51	As of 12/31/52
<i>Utility operating property</i>		
Prior to 1948	\$21,343.00	\$21,343.00
Since 1948	18,733.00	24,942.00
<i>Current assets</i>		
Cash and Materials and Supplies	\$1,931.00	\$2,268.00
Accounts receivable	11,643.00	11,292.00
<i>Total assets</i>	\$53,650.00	\$59,845.00
	LIABILITIES	
<i>Capital Stock</i>	\$1,200.00	\$1,200.00
<i>Current liabilities</i>		
Notes payable	14,342.00	18,399.00
Accounts payable	7,083.00	6,493.00
Other current liabilities	3,614.00	4,306.00
Reserve for depreciation	11,022.00	14,316.00
Reserve for revaluation (net) ²	16,288.00	14,603.00
Earned surplus	101.00	527.00
<i>Total liabilities</i>	\$53,650.00	\$59,844.00 ¹

¹ Sic.

² Improperly termed capital surplus in D.P.U. 9741.

During the year 1952, respondent had gross revenues of \$30,285, and operating expenses of \$29,185, resulting in a net income of \$427. Profit

and loss statements for the year ending December 31, 1952, and for a projected year are as follows:

	Year ending 12/31/52 (present rates)	Projected year (proposed rates) \$39,300
Operating income	\$30,285	
Operating expenses		
Maintenance	\$5,910	\$7,100
Traffic (wages only)	9,894	13,500
Admin. & general	13,381	15,100
 Total	29,185	35,700
Gross income (incl. non-op.)	1,135	3,600
Deductions (int. incl. tax)	708	1,400
Net income	427	2,200

The increases in expense noted are in large measure stated by the management to be firm estimates based on present commitments, as contrasted with the situation concerning which we remarked in our findings in D.P.U. 9741.

The present station distribution (estimated as of October, 1953) and the present rates, as compared with the proposed rates, are as follows:

Type of Service	Number of Stations	Present Rates (without mileage)	Proposed Rates
1B	17	5.50	6.75
1R	45	3.25	4.25
2B	8	5.00	6.00
2R	18	3.00	3.75
4B	2	4.25	5.25
4R	29	2.50	3.25
8B	23	4.00	5.00
8R	403	2.50	3.50

Rural lines carry no mileage under either of these rate schedules. The

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proposed rates result in an increase in monthly revenues of \$538.50, or \$6,462 a year, or an over-all increase in local exchange rates of about 33.4 per cent.

It will be noted that, under the proposed rates, a 4-party residence user within the base rate area would pay less than a rural line subscriber. In view of the final disposition which we are making of this matter, it is unnecessary to go into a discussion of this detail. It is enough here to point out that such an anomaly must be based upon concrete evidence of costs, which is completely lacking in the present case. It is possible that the relative investment and maintenance costs per customer are higher on long multiparty lines. On the other hand, the value of the service is certainly less. While the Department will not usually interfere with the determination of the management as to a proper rate schedule (see *Re Western Massachusetts Electric Co.* D.P.U. 9658), such attitude is conditioned upon at least a *prima facie* reasonableness. It is the burden of the management to substantiate any rate proposal by evidence based upon something besides sheer expediency.

We pointed out in January, 1952, some eighteen months ago, that this company was authorized in October, 1951, to capitalize its accrued construction credits and to borrow \$40,000 to finance further expansion. We also then found that, effective October 5, 1951, it had been given statutory authority to borrow up to \$165,000 in all, but that it had not chosen as yet to file the necessary petition with the Department for approval of such additional amount. Such petition was

thereafter filed on May 13, 1952, and order approving such borrowing was issued on January 13, 1953, D.P.U. 10119.

The service rendered by respondent has not improved since our order in D.P.U. 9741, although it has been authorized since October 5, 1951, to borrow funds from the Rural Electrification Administration to cover the requisite plant. There are still as many as sixteen parties on its 8-party lines, and it is holding a completely disproportionate number of applications for service and for regrades. Respondent is required by its loan contract with the REA to fill all reasonable applications for service, and its plans for reconstruction as disclosed to us from time to time contemplate its so doing. On its present rates, and assuming, probably contrary to fact, that all of its regrades and new service will be at residence rates, it will, when its plant is so extended, receive new revenues of over \$400 a month, or within about \$100 a month of the additional amount it is seeking in the present application. An analysis of its balance sheets and operating statements clearly indicates to us that, due to large savings in operating expense and other disbursements, the respondent will be able to operate at a substantial and adequate profit after its plant is modernized and extended, even on its present rates. The terms of the proposed loan are most favorable. It is going to be required to pay interest at only 2 per cent, and to amortize the loan over a period of thirty-five years, which is substantially in excess of the normal life expectancy of the equipment so installed. No reason appears in the record, nor have we

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been favored with any reasonable explanation off the record for this delay of the management in proceeding with this program. As matters stand at present, then, respondent could, if we allowed these proposed rates to be placed in effect, abandon its loan negotiations and continue to render its present unsatisfactory and inadequate service or else complete the proposed construction and operate at rates which we believe would then yield a disproportionate and excessive return.

We believe that management owes a duty of vigilance and efficiency in the operation of a public utility such as this one. We cannot find this management has been either vigilant or efficient. If it had taken prompt advantage of the opportunities open to it, respondent would now be operating in an atmosphere very different from that described in this record, and

we find that the increased rates now before us would be unnecessary in order to enable respondent to earn a fair return upon property invested in utility plant. We find that the respondent has inexcusably failed so to conduct itself as to subject its customers to the least possible burden by taking the necessary steps available to it. See *Re Northwestern Bell Teleph. Co.* (Minn 1950) 86 PUR NS 218. We find that respondent has not sustained the burden of proving that the proposed rates are just and reasonable, and accordingly, it is hereby

Ordered: That the rates and charges for telephone service contained in Revised Sheet 7, § 1, of M.D.P.U. No. 3, filed by Granby Telephone and Telegraph Company of Massachusetts be and the same hereby are disapproved and disallowed.

WYOMING PUBLIC SERVICE COMMISSION

Re Pinedale Telephone & Telegraph Company

Docket No. 9231
June 19, 1953

APPPLICATION by telephone company for authority to increase rates; approved as modified.

Valuation, § 36 — Net investment cost.

1. Net investment cost was considered a proper rate base for a telephone company, p. 56.

Valuation, § 67 — Net investment determination — Inadequate records — Purchase price.

2. A telephone company's determination of net investment was not allowed for rate-making purposes, since the company's predecessor did not keep property records, company records showed no accumulated reserve, and

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the amount ascertained did not represent original depreciated cost but was merely the purchase price of the properties, plus additions, less depreciation, p. 57.

Depreciation, § 76 — Telephone plant — Absence of original cost records.

3. Telephone "equipment" was classified as poles and wires on an equal basis for depreciation purposes when it could not be determined what items of "equipment" were included, the original cost thereof, or the date placed in public service, p. 57.

Expenses, § 77 — Materials and supplies — New construction — Telephone company.

4. A telephone company was allowed to charge to operating expenses an amount expended for materials and supplies where it was not shown whether such items were used in the construction of new plant or for maintenance and repair of existing plant, with directions that hereafter the company charge all amounts expended for materials and supplies used in the creation of new plant to plant account rather than to operating expense, p. 58.

Expenses, § 81 — Office furniture.

5. The purchase of office furniture represents a capital expenditure and should be disallowed as an operating expense, p. 58.

Expenses, § 23 — Miscellaneous tools — Telephone company.

6. A telephone company's purchase of miscellaneous tools constitutes a capital expenditure and should be disallowed as an item of operating expense, p. 58.

Expenses, § 57 — Interest — Delinquent payments.

7. A telephone company's payment of delinquent interest on its mortgage indebtedness should not be allowed as an operating expense, p. 58.

Expenses, § 103 — Salary related to new construction.

8. That part of salary taken by a proprietor of a telephone company for work on new plant construction was disallowed as an operating expense and was charged to plant account, p. 58.

APPEARANCES: John S. Mackey, Attorney at Law, Pinedale, appearing for applicant, Pinedale Telephone & Telegraph Company; no other appearances.

By the COMMISSION: Pursuant to orders entered herein by the Commission on February 6 and 14, 1953, and notice duly given in accordance therewith, proof of which is on file herein, this matter was heard by Commissioners Albert P. Bruch and Richard J. Luman at the time and place therein designated on March 17, 1953, with appearances as above set forth.

The entire Commission now having duly considered said application, the testimony and exhibits of record, the statements and representations of counsel with respect thereto, and being fully advised in the premises, hereby enters its opinion, findings, and order herein as follows:

Pinedale Telephone and Telegraph Company is a telephone utility owned and operated by Earle F. Crandall who resides in Pinedale, Wyoming. The company is engaged in the business of providing and furnishing telephone service to the public within the

WYOMING PUBLIC SERVICE COMMISSION

corporate limits of the town of Pine-
dale, Wyoming, within the immediate
rural territory surrounding said mu-
nicipality (exchange area), and to
subscribers within the communities of
Cora, Daniel, and Boulder, Wyoming,
at rates heretofore filed with and ap-
proved by the Commission. In addi-
tion, the company also performs so-
called switching service at filed rates
for subscribers on lines of service station
associations that are connected
with its central office. The company
has never filed an application with the
Commission for a certificate of public
convenience and necessity defining its
exchange area, nor has it filed with
the Commission a map outlining said
area or its base rate area.

The company, by its verified applica-
tion filed herein on December 10,
1952, seeks an order of the Commis-
sion authorizing it to file and place
in effect proposed tariffs and rules and
regulations applicable thereto, devel-
oped and designed to produce addi-
tional gross operating revenues
amounting to \$4,816.50. The pro-
posed tariffs which are attached to the
application filed herein as Exhibit "A"
provide for various grades of busi-
ness, residence, and rural service
within the base rate and exchange
area of the company as defined therein.

In support of its application, the
company offered in evidence an in-
come statement for the year ending
December 31, 1952, prepared by its
accountant which shows an operating
loss of \$2,438.69. The company con-
tends that its rate structure should
be adjusted so that its operating rev-
enues will be sufficient to permit the
recovery of its operating expenses, in-
cluding depreciation, and to allow

its proprietor (Crandall) to earn a
reasonable return on his investment in
its properties that are being used to
provide telephone service to the Pine-
dale community. Thus we are called
upon to determine, under our dele-
gated statutory authority and the evi-
dence of record in this proceeding,
what are just and reasonable rates for
applicant utility.

[1] Section 64-121, Wyoming
Compiled Statutes, 1945, gives the
Commission considerable latitude in
the matter of determining what are
just and reasonable rates for a public
utility. In fixing such rates, we are not
required by law to employ and follow
any formula (rate base). *Natural Gas Consumers of Rock Springs v. Northern Utilities Co. of Casper (1952) — Wyo —, 247 P2d 767.* However, as pointed out in our opin-
ion in Docket No. 9210, in *Re Plains Pipe Line Co. (1952) 96 PUR NS 587*, we deem it expedient and prac-
tical to determine and use a rate
base in fixing the revenue require-
ments of a public utility whenever it
is possible for us to do so. We ap-
prove net investment cost as a proper
rate base for a telephone utility. *In Re Mountain States Teleph. & Teleg. Co. (1953) Docket No. 9222, 97 PUR NS 114.* Briefly such a rate base is
described as the depreciated original
cost of plant devoted to public serv-
ice plus a reasonable allowance for
materials and supplies and cash work-
ing capital. Therefore, as stated in
Docket No. 9146, June 12, 1950,
Re Northern Utilities Co. in determin-
ing whether a utility is entitled to a
rate adjustment, we normally start
with a rate base developed in the man-
ner aforesaid, determine acceptable

RE PINEDALE TELEPH. & TELEG. CO.

expense items, and then adjust its rates so that they will produce operating revenues sufficient to cover same and allow the company or its proprietor a reasonable return on said rate base.

[2] The company offered in evidence a balance sheet prepared by its accountant showing depreciated plant or fixed assets amounting to \$24,375.84, as follows:

	Cost	Reserve for De- preciation	Balance
Building	\$9,000.00	\$975.00	\$8,025.00
Improvements	1,312.30	98.42	1,213.88
Equipment ..	22,567.95	8,543.29	14,024.66
Land	1,112.30	.....	1,112.30
	\$33,992.55	\$9,616.71	\$24,375.84

Proprietor Crandall contends that he is entitled to earn a reasonable return on said amount as same represents his net investment in telephone utility properties dedicated to public use.

The company purchased the properties comprising its telephone system from William F. Parish and Sallie G. Stewart Parish, husband and wife, on November 1, 1950, for the sum of \$26,000; and that said purchase and transfer was approved by order of the Commission entered in Docket No. 9171 on October 20, 1950. This order did not prescribe the manner in which the involved utility properties should be entered upon the books of the company, i.e., a determination of the amount by which said purchase price exceeded the original depreciated cost thereof. The amount of the company's depreciated plant assets above set forth does not represent the original depreciated cost thereof, but same represents the purchase price of said properties plus additions thereto since

November 1, 1950, less depreciation according to a Depreciation Schedule developed by the company. Applicant's predecessors did not keep any property records or a record showing the company's accumulated depreciation reserve as of said transfer date. Applicant has not submitted a historical cost appraisal of the telephone utility properties acquired by it on the date aforesaid or any evidence showing the cost of the annual additions thereto. Consequently, it is impossible for us to determine a depreciated original cost rate base for the company from the evidence of record in this proceeding upon which it should be allowed to earn a reasonable return; neither can we approve a rate structure for the company which will allow its proprietor to earn an income return on the amount of its depreciated plant assets set forth above as said amount does not reflect the depreciated original cost thereof; nor do we approve the depreciation schedule submitted by the company.

[3] The building mentioned in the fixed assets of the company listed above is a dwelling house located in Pinedale, Wyoming. Proprietor Crandall and his wife reside therein. It also houses the central exchange facilities of the company. While we do not seriously object to the value assigned to this property and the division of the use thereof, we think it has a remaining life expectancy of twenty years instead of ten years. The item of "Equipment" (\$16,000) mentioned in applicant's depreciation schedule represents the purchase price of its utility properties less the value assigned to the building above men-

WYOMING PUBLIC SERVICE COMMISSION

tioned and the land upon which same is situated. As pointed out above, we cannot determine from the evidence the items included in this figure, the original cost thereof or the date they were placed in public service. In the absence of such evidence, it is our considered judgment that for depre-

ciation purposes, same should be classified as poles and wires on an equal basis; and that a life expectancy of ten years should be assigned thereto. As to the properties above mentioned and other depreciable assets, we find that same should be depreciated according to the following schedule:

	Year Bought	Amount Paid for Plant	Est. Life Years	Percent Salvage	Rate of Deprecia- tion (%)	Amount Accrued each Year
Land	1950	\$1,112.30				
Building	1950-1951	5,156.15	20	16	4.2	\$216.56
1950 Chevrolet Truck	1950	1,756.61	6.9	26	10.7	187.95
1951 Buick	1951	1,305.00	6.9	26	10.7	139.64
Truck Bed	1951	480.00	6.9	26	10.7	51.36
Switchboard	1950	115.42	3	10	30	34.62
Welding Set	1952	100.00	7	7	13.3	13.33
Adding Machine	1952	84.12	22	12	4	3.36
Vacuum Cleaner	1952	137.90	7	7	13.3	18.34
Telephones	1952	750.00	17.7	4	5.4	40.50
Plant, Poles	1950	8,000.00	10	-15	10.5	840.00
Plant, New Poles	1952	533.90	27	-15	4.3	22.96
Plant, Wires	1950	8,000.00	10	2	9.8	784.00
		\$27,531.40				\$2,352.62

and that new plant should be depreciated in accordance with the formula approved by the Commission for the depreciation of telephone utility properties.

[4-8] We now direct our attention to the operating expenses of the company for the year 1952, as set forth in P.S.C. Exhibits Numbered 3 and 4. The amount expended by the company for materials and supplies (\$1,886.49) as shown by said exhibits is not properly chargeable to operating expense if the same were used by it in the construction of new plant, as said amount would constitute a capital expenditure rather than an item of operating expense. In the absence of evidence showing whether said materials were used for the construction of new plant or for the maintenance and repair of existing plant, we have allowed said amount to re-

main as an item of operating expense; however, we direct that, hereafter, the company charge all amounts expended by it for materials and supplies that are used in the creation of new plant to its plant account rather than to operating expense. The evidence shows that the item "Office Expense" as shown on said exhibits (\$476.82) represents office furniture purchased by the company. This is also a capital expenditure; and by reason thereof, said amount should be eliminated as an item of expense and charged to the furniture and fixtures account of the company. Miscellaneous tools purchased by the company should also be charged to its plant account and eliminated as an item of operating expense (\$123.35). During the year 1952, the company paid interest on its mortgage indebtedness in the sum of \$1,476.75. Of this amount, \$492.25

RE PINEDALE TELEPH. & TELEG. CO.

represents interest due during the year 1951. Therefore, this item of operating expense should be reduced to \$984.50. During the year 1952, proprietor Crandall withdrew from the business the sum of \$5,186.01 by way of proprietor's salary. We approve the amount of such withdrawals as being fair and reasonable salary for the work performed by him on behalf of his company as detailed in the record. According to his testimony, however, he worked 1,356 hours during said year on new plant construction. Therefore, \$2,800.14 of said salary withdrawals should be charged to the plant account of the company and the balance (\$2,385.87) to operating expense. The record indicates that proprietor Crandall will work approximately the same number of hours on new plant construction during the year 1953. We direct that, in the future, salary withdrawals by proprietor Crandall for work performed by him on new construction be charged to the plant account of the company rather than to operating expense. Proprietor Crandall's wife worked many hours for the company during the year 1952 as an operator and otherwise for which she received no compensation. He contends that she should be paid a salary of \$3,264 per year for the work she performs for the company. We find that the company should be allowed to pay her a salary of one dollar per hour for a 40-hour week or \$2,080 per annum; and that the company's operating expenses should be adjusted accordingly. The company states that its traffic load has increased to the point where it is necessary for it to employ an additional operator for a period of seven months

during each year at a salary of \$150 per month; and that it will be necessary for it to employ a repair and maintenance man to perform general maintenance and repair work in the rehabilitation of its telephone system and the installation of new plant. Considering the evidence, we find that the company should be allowed earnings that will permit it to employ an additional operator during the tourist season, i. e., a period of four months each year, at the salary above mentioned; and that it should be allowed to expend \$1,050 per year for the employment of a repair and maintenance man.

The following is a pro forma Income and Expense Statement prepared by our staff in accordance with our adjustments and allowances in the expense items of the company above indicated: [See Table on page 60.]

The company anticipates an 11 per cent station gain during the year 1953. This will produce additional exchange operating revenues. The Bell System has offered independent companies a more liberal division of interchanged toll revenue; and if said offer is accepted by the independent companies, applicant's toll revenues will also be increased. Considering said increases, the operating loss as reflected by said pro forma income statement and all of the evidence of record herein, we conclude and find that applicant's existing rates are unjust and unreasonable; that it should be directed to file tariffs which will produce additional operating revenues in an amount not to exceed \$1,892, based on its volume of business in 1952; and that otherwise said application should be denied. The addi-

WYOMING PUBLIC SERVICE COMMISSION

<i>Gross Income</i>	\$37,863.18
<i>Operating Expenses:</i>	
Materials and Supplies	\$1,886.49
Salaries	3,263.16
Rent	271.00
Insurance	274.68
Travel Expense	888.12
Repairs and Maintenance (Building)	163.25
Accountant's Fee	20.00
Bank Charges	227.06
Auto and Truck Expense	868.65
Light, Heat and Power	359.76
Advertising	128.89
Workmen's Compensation	3.07
Dues and Subscriptions	75.51
Office Expense	528.43
Toll Charges, Mountain States Teleph. & Teleg. Co.	12,537.57
Donations	25.00
Interest	984.50
Unemployment Tax	74.95
Payroll Tax	303.01
Federal Excise Tax	5,778.55
Wyoming Sales Tax	403.17
County Taxes	359.65
	<u>29,424.47</u>
	<u>\$8,438.71</u>
Proprietor's Salary, (Mr. Crandall)	2,385.87
Salary, Mrs. Crandall	2,080.00
Wages, Extra Operator	600.00
Wages, Repair and Maintenance Man	1,050.00
Depreciation	2,352.62
	<u>8,468.49</u>
Operating Loss	(\$29.78)

ditional operating revenues hereby allowed will permit the company to pay its operating expenses, enable it to render adequate and efficient service, and allow its proprietor the sum of \$1,862, which amount should be sufficient to service the mortgage indebtedness of the company and to take care of any probable emergency.

An order will be entered herein accordingly.

ORDER

It is therefore *ordered*:

1. That the company be and it hereby is directed forthwith to file with the Commission tariffs which will produce additional gross operating revenues in an amount not to exceed \$1,892, based on its volume of business in 1952; that said tariffs shall become effective on one day's notice after the filing thereof; and that same shall apply to billing dates subsequent thereto; and

2. That this order shall become effective as of the date hereof.

WISCONSIN PUBLIC SERVICE COMMISSION

Re Chicago & North Western Railway Company

2-R-2506
August 21, 1953

APPPLICATION for rehearing of Commission's decision on discontinuance of passenger trains; rehearing denied.

Procedure, § 32 — Rehearings and reopenings — Purpose of each.

1. A rehearing is for the purpose of directing attention to matters allegedly

RE CHICAGO & NORTH WESTERN R. CO.

overlooked or mistakenly conceived in the original decision, while a reopening is for the purpose of enabling the Commission to consider matters not previously in the record, p. 61.

Procedure, § 32 — Rehearing — Commission jurisdiction.

2. The Commission has jurisdiction to entertain an application for a rehearing with respect to an order issued after a prior rehearing and reopening, p. 61.

Procedure, § 33 — Rehearing — Grounds for refusal.

3. A rehearing on the question of discontinuing passenger trains was denied where all matters raised in the application had been fully considered in previous proceedings, p. 62.

By the COMMISSION: The Commission on January 16, 1953, issued an order in this matter permitting the Chicago and North Western Railway Company to discontinue operation of trains Nos. 11 and 12 between Monico, Wisconsin, and Watersmeet, Michigan, from October 1st to May 15th each year except on Saturdays or Friday holidays for No. 11 and except on Sundays or Monday holidays for No. 12.

On February 17, 1953, the Commission issued an order granting, and notice of, rehearing and reopening with the scope of the rehearing and reopened hearing "to include daytime train service, substituted or other bus service, and all other relevant and material matters." Such order was issued pursuant to requests from some of the objecting municipalities and a counter request from the railroad.

On July 17, 1953, the Commission authorized the seasonal discontinuance of the two trains on the Wisconsin portion of the line conditional upon substitution of bus service by the railroad in its own name.

On August 3, 1953, the village of Eagle River and the towns of Land O'Lakes, Conover, Phelps, and Three Lakes filed an application for rehear-

ing on the order of July 17, 1953. No reply thereto was made by the railroad or other parties.

Section 196.405(3), Statutes, provides: "Only one rehearing shall be granted by the commission; but this shall not be construed to prevent any party from filing a new application or complaint." Section 196.39, Statutes, authorizes the Commission to reopen any case following the issuance of an order therein for the taking of further evidence or for any other person or for any other reason "at any time, on its own motion or upon motion of an interested party."

[1] The supreme court of Wisconsin in *Milwaukee v. Public Service Commission* (1951) 259 Wis 30, 88 PUR NS 475, 47 NW2d 298, has distinguished between reopening and rehearing. The court indicated that a reopening is for the purpose of enabling the Commission to consider matters not previously in the record, while a rehearing is for the purpose of directing attention to matters allegedly overlooked or mistakenly conceived in the original decision. Rehearing thus invites reconsideration of the record upon which the decision rested.

[2] In this case where there was a reopening as well as rehearing, the

WISCONSIN PUBLIC SERVICE COMMISSION

Commission considers rehearing proper with respect to the order issued after such rehearing and reopening. It follows that the Commission has jurisdiction to entertain the instant application for rehearing.

[3] All matters raised in the application for rehearing were fully considered by the Commission prior to the issuance of the July 17, 1953, order,

and there is no good cause for rehearing.

Conclusion of Law

The Commission concludes:

1. That its order of July 17, 1953, was reasonable and lawful.
2. That it is empowered by § 196.405, Statutes, to deny rehearing herein and that an appropriate order should issue.

WISCONSIN PUBLIC SERVICE COMMISSION

Re Interstate Power Company of Wisconsin

CA-3151, 2-U-4017
July 6, 1953

APPPLICATION by electric company for authority to connect its system with an electric co-operative to purchase energy from the co-operative; approved.

Intercorporate relations, § 1 — Electric company — Connection with co-operative.

1. An electric company was permitted to connect its system with an electric co-operative where such connection would not impair the efficiency of the service, would not provide capacity unreasonably in excess of probable future requirements, and would not add to the cost of service, p. 63.

Intercorporate relations, § 2 — Purchase of energy from co-operative — Resulting savings.

2. A contract for the purchase of energy by an electric company from an electric co-operative was approved where it appeared that the cost of energy from the co-operative would be less than the charge of the present supplier and that increased savings would result from the new source of power, p. 63.

Rates, § 302 — Automatic adjustment — Effect of taxes.

3. A tax clause which provided for an automatic rate change on the basis of gross revenue, property, or income taxes, in a contract governing the purchase of energy by an electric company from an electric co-operative, was deemed unreasonable, p. 63.

Rates, § 302 — Automatic adjustment — Taxes on electric sales.

Statement that a tax clause providing for automatic rate changes to reflect

RE INTERSTATE POWER COMPANY OF WIS.

a tax levied directly upon the generation, transmission, or sale of power by an electric co-operative to an electric utility would not be unreasonable, p. 63.

By the COMMISSION: The Interstate Power Company of Wisconsin, operating as an electric utility in Grant and Crawford counties in southwestern Wisconsin, on April 3, 1953, filed an application with the Commission for authority under § 196.49, Statutes, and general order 2-U-20 to connect its system with that of the Dairyland Power Co-operative and to purchase energy from the co-operative.

APPEARANCES: Carl Hummel, Vice President, E. A. Stewart, Rate Engineer, and Glen H. Bell, Attorney, for the Interstate Power Company; R. E. Purucker, engineering department, E. M. Downey, rates and research department, and R. G. Dudley, rates and research department, of the Commission Staff.

The Commission finds the essential evidentiary facts to be as follows:

[1, 2] The Interstate Power Company of Wisconsin, an electric utility operating in Grant and Crawford counties, now purchases a large part of its energy requirements from an affiliate, Interstate Power Company of Delaware. The energy charge in the last block of the rate applicable to these purchases, after allowance for the fuel clause at present levels, is 1.12 cents a kilowatt hour. The contract covering the sale of energy by Dairyland to the applicant provides for a cost of energy during the first year of .573 cents a kilowatt hour, after allowance for the effect of the fuel clause at present levels. The rate is

increased in 1954, 1955, and 1956 to an average of .832 cents a kilowatt hour, assuming the minimum deliveries of energy provided in the contract and no change in fuel costs or taxes. Should greater amounts of energy be taken this average would be reduced.

The minimum saving to the applicant during 1953, based upon the above figures and assuming minimum deliveries of energy would be \$12,308 and that in 1954, 1955, and 1956 would be \$8,640. Increased savings would result if greater amounts of energy were taken or if the maximum demand on the system of Interstate Power of Delaware could be reduced by reason of the new source of power.

[3] The rate under which applicant purchases energy from Interstate Power Company of Delaware contains a fuel clause, and it is not probable that the savings shown above would be changed materially in the event of fluctuations in fuel prices. The tax clause contained in the contract between the applicant and Dairyland, is of a type heretofore disapproved by the Commission. The Commission has no objection to a tax clause which provides for automatic rate changes to reflect a tax levied directly upon the generation, transmission, or sale of electric power. Gross revenue, property, or income taxes, however, should not be the basis for automatic rate changes.

The Interstate Power Company will not be required to make any investment in new facilities.

The Commission finds:

WISCONSIN PUBLIC SERVICE COMMISSION

1. That public convenience and necessity require that Interstate Power Company of Wisconsin connect to the facilities of the Dairyland Power Co-operative.

2. That the connection for the new source of power and the contractual arrangement will not impair the efficiency of the service; will not provide capacity unreasonably in excess of probable future requirements; and will not add to the cost of service without proportionately increasing the value or available quantity thereof.

3. That the contract governing the purchase of energy by Interstate Power Company of Wisconsin from Dairyland Power Co-operative is reasonable in all respects but one: namely, in the tax clause set forth in paragraph (2) (b) of the rate schedule embodied therein.

4. That the tax clause set forth in paragraph (2) (b) of the rate schedule portion of the contract is unreasonable in so far as it permits automatic changes in the rate resulting from changes in gross revenue, property, or income taxes.

The Commission concludes:

1. That the aforesaid connection

with the Dairyland Power Co-operative meets with the requirements of § 196.49, Statutes, and Commission general order 2-U-20.

2. That an order and certificate should be issued in accordance with the above findings.

It is therefore certified:

That the Interstate Power Company of Wisconsin as an electric public utility be and hereby is authorized to connect to the facilities of the Dairyland Power Co-operative at the point contemplated and purchase energy, subject to the conditions that the connection be made within one year of the date hereof and the order below is complied with.

ORDER

The Commission therefore *orders*:

1. That Interstate Power Company of Wisconsin report to this Commission the date when the connection is made.

2. That the contract be revised to either: (1) eliminate the tax clause in the rate schedule of the purchase contract; or (2) provide for a tax clause consistent with the findings herein.



Industrial Progress

A digest of information on new construction by privately managed utilities; similar information relating to government owned utilities; news concerning products, supplies and services offered by manufacturers; also notices of changes in personnel.



Atlantic City Electric Steps Up Expansion

ATLANTIC CITY ELECTRIC COMPANY which is experiencing the biggest year in its history, has increased its construction program, according to B. L. England, president.

During 1953 and 1954 the company will spend \$31,500,000 on new plant and construction. A \$27,500,000 budget was previously planned. This will be the largest two years' construction program in the company's history and will almost equal the expenditures for the first 40 years of the firm which totaled approximately \$40 million.

Predicts \$5 Billion Annual Air Conditioner Sales

WITHIN the next five years, according to the American Institute of Management, New York, more than two million homes in the United States will be fully air conditioned, as compared with only 100,000 today. By 1963, the industry's annual sales—including industrial and commercial installations—will exceed \$5 billion.

In an appraisal of the industry, recently distributed to the organization's 12,000 members, the Institute predicts that sales of year 'round residential air conditioning systems will total 200,000 in 1954; 240,000 in 1955; 360,000 in 1956; 540,000 in 1957; and 700,000 in 1958.

"Within ten years," the report advises, "the non-air conditioned home will be obsolete, at least in most parts of the country. Year 'round air conditioning will be standard equipment in practically all new homes and there will also be a very large number of existing residences in which similar equipment will be installed, or cooling units added to the heating plants."

The potential market for central system equipment for industrial, commercial and business structures is equally enormous, the report points out. Sales of such equipment, the authors say, will increase from \$600 million in 1953 to \$2 billion in 1959.

Copies of the report may be obtained from the Institute, whose headquarters are at 125 East 38th street, New York 16, New York.

"Underwater Giant" Film Released

THE OKONITE COMPANY has released a new sound color film, "Underwater Giant," a vivid and technically complete history of the manufacture and laying of a three-quarters of a million pound, world record submarine power

cable. The 20-minute 16mm picture reveals the extensive design and construction effort that went into the 7½-mile long high voltage, rubber-insulated underwater "giant" that now crosses Puget Sound. The huge cable required 1,400 miles of copper wire and 18 tons—half a carload—of rubber.

The film documents the history of the cable from the time it was designed until the final foot was submerged. Shots of the manufacturing operation show how the cable was assembled and tested and how the unusual handling problems created by its size were solved in the factories. The single shipping length required nine freight cars.

The last half of the film pictures, step by step, the carefully planned and executed procedures which enabled the installation crews to lay the cable across Puget Sound from a special cable-laying barge in record time.

Viewing dates can be arranged by writing the Motion Picture Department, The Okonite Company, 101 Canal street, Passaic, N. J., specifying a choice of dates.

Lighting Glassware Handbook Issued by Corning Glass Works

A 24-PAGE book, "Architects and Engineers Handbook of Lighting Glassware," has just been published by Corning Glass Works, Corning, New York, and is available upon request to all who are interested in commercial lighting.

The basic types of lighting glassware are completely described, both those designed for use with fluorescent fixtures and those in the engineered incandescent lighting field.

Recommendations for the most effective use of these types in producing desired levels of illumination and qualities of light with respect to brightness and color are included, as are suggestions for the integration of lighting equipment into the architectural theme of the building.

Attention is also given to simplified methods of estimating lighting intensities, which allow

(Continued on page 26)

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Cochrane Issues Catalog on Solid Contact Reactor

A NEW 24-page Bulletin on its Solids Contact Reactor for clarifying and/or lime softening of water has been published by the Cochrane Corporation, 17th St. below Allegheny Avenue, Philadelphia 32, Pennsylvania.

This catalog defines the major advantages of the Solids Contact principle, gives the eight basic requirements for sound Solids Contact Reactor design and shows how these features are incorporated by Cochrane. It illustrates the basic reactor types that can be supplied—round or square units with vertical shaft agitator, and rectangular units with horizontal shaft agitator. Reactors can be made of concrete, steel or wood or combinations of these materials. Chemical feed and auxiliary equipment also are described.

Copies of this publication, No. 5001-A, are available.

WANTED: Accountant experienced in public utility regulatory and rate accounting. Salary up to \$6,000 depending upon experience and ability. Write for application form. *Florida Railroad and Public Utilities Commission, Lock Drawer 810, Tallahassee, Florida.*

Niagara Mohawk Places 100,000 KW Unit in Service

NIAGARA MOHAWK POWER CORPORATION recently placed in service a 100,000-kilowatt addition to its Albany, New York, steam-electric generating plant. This one is the third generating unit in the station, and a fourth, now under construction, will go into operation next year. When completed the Albany unit will have a total capacity of nearly 400,000 kilowatts and will be the largest electric generating plant in eastern New York.

Carco Steel Light Pole Catalog

PACIFIC CAR AND FOUNDRY COMPANY of Renton, Washington, has just released a 14-page catalog on Carco steel light poles. This catalog contains complete specifications of the standard anchor base and transformer base poles and brackets, as well as details on their important exclusive features. Cutaway and exploded views give a comprehensive picture of component parts together with erection data for the purchasing agent, architect, engineer or installation crew.

The catalog provides a detailed description of how mounting heights and bracket lengths may be varied to fit the individual requirements of the purchaser, with additional information

(Continued on page 28)

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Here is a ten-session practical course in electricity to meet the need of all non-technical utility employees to understand their company's operations, to learn the meaning of the words they use and have the personal satisfaction of better representing the place in which they work. It is prepared in down-to-earth language by qualified utility engineers to answer this definite need for better informed employees. If you feel your non-technical employees are the exception, try asking four or five of them to define the Kilowatt hour in language that your non-technical customers would understand.

•

This instructor-type course further offers a sound groundwork for the employee who wishes to take more advanced training to qualify for special work. In the words of Mr. Clyde Hussey, Training Director for Arkansas Power & Light, "*This is by far the best training course we have ever used.*" It is completely adaptable to each individual company's needs. A teacher's manual outlines for the instructor the presentation of each unit and offers suggestions for simple demonstrations and visual aids. Instructors themselves get a new experience in teaching which is a vital part of good supervisory training.



Several leading utilities are now making this course available to their employees on a voluntary basis. Many old-timers, newcomers, men and women, employees from all departments for the first time get to understand the Kilowatt hour as a measure of progress. This one commodity from which many of these employees earn their living takes on a new meaning. Regardless of the employee's job, he recognizes it is not an isolated function but an essential part of the whole cooperative effort. Based on the experience of those having used this training, the course is a proven means in meeting a real need.

FREE 30-DAY EXAMINATION

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Albany 1, New York

Please send at once..... copies of *Simplified Electricity for Utility Workers*. We wish to examine this course for possible use by our company. Include Teacher's Manual.

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on feeder arms, festoon outlets, hand holes and other modifications and accessories. Complete specifications are given on the galvanized steel light pole which has been pioneered by Carco.

Free copies of the Carco catalog are available from the manufacturer.

Grinnell Installs Pyrene Air Foam Systems

Air foam fire extinguishing systems designed and manufactured by the Pyrene Manufacturing Company, Newark, N. J., are now offered for sale and installation through the nationwide organization of the Grinnell Company, Inc., Providence, Rhode Island.

The non-exclusive arrangement with Grinnell does not alter the sale of Pyrene air foam systems, mobile and portable equipment through Pyrene's own district offices and air foam jobbers. It does however bring the world's largest organization for the installation of sprinkler systems as well as all types of piping work together with the makers of the most complete line of air foam equipment available.

New Kaylo Literature

OWENS-CORNING FIBERGLAS CORPORATION has published a brochure describing Kaylo heat insulation which the company distributes.

The publication contains a listing of physical characteristics of Kaylo pipe insulation and Kaylo heat insulating blocks; typical applications, K factors, standard sizes, thicknesses and forms, recommended thicknesses and insulation efficiencies. In eight pages the publication includes 12 photographs, three graphs and five charts.

Kaylo products, made of a chemical compound of lime and silica, are effective up to 1200 degrees Fahrenheit. Copies of the publication may be obtained by writing to Owens-Corning Fiberglas Corporation, Toledo 1, Ohio.

Nordberg Appointment

APOINTMENT of H. J. Feichtmann, Nordberg sales engineer as district manager Heavy Machinery Division, North Central Territory, has been announced by R. W. Bayerlein, vice president, Heavy Machinery Division, Nordberg Manufacturing Company, Milwaukee, Wisconsin.

Mr. Feichtmann succeeds Mr. E. C. Brooks, former district manager now retired, and will serve Nordberg customers in Northwestern Wisconsin, Minnesota, the Dakotas, Wyoming, and Eastern Montana. He will presently work out of the home office in Milwaukee, Wisconsin.

COLLEGE GRADUATE with engineering degree, under 40. Experience required in electric utility rate analysis, cost of service studies, processing applications before regulatory commissions. Must possess capabilities for advancement to executive position. Southern California location. Include picture with letter giving detailed qualifications. Box No. 10, *Public Utilities* Fortnightly, 309 Munsey Bldg., Washington 4, D. C.

Direct Line Telephones For Executives

How executives can improve their own efficiency through direct inter-office communication is described in the 4-page, illustrated booklet, "The Executive Direct-Line Telephone."

The booklet explains how executives can reach key employees with a flip of the switch, assuring more direct control and speed. Copies supplied on request to the manufacturer: Automatic Electric Company, 1033 W. Van Buren street, Chicago 7, Illinois.

R & S Appoints T. G. Campbell Manager, Statistical Service

RECORDING & STATISTICAL CORPORATION, New York, announces the appointment of T. G. Campbell as manager of all Statistical Service offices in the United States. R & S maintains complete offices in New York, Boston, Chicago, Detroit, Montreal and Toronto, Canada.

Prior to joining R & S, Mr. Campbell had extensive experience in the development and publicizing of new, punched card accounting methods and systems.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, AND CIRCULATION REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (39 U. S. C. 233) of *Public Utilities* Fortnightly published fortnightly at Baltimore, Maryland for October 22, 1953.

1. The names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher: *Public Utilities Reports, Inc.*, Washington, D. C.

Editor: Ellsworth Nichols, Washington, D. C. Managing editor: Francis X. Welch, Washington, D. C.

Business manager: A. S. Hills, Washington, D. C.

2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual member, must be given.) *Public Utilities Reports, Inc.*, Washington, D. C.: Owen D. Young, New York, N. Y.; George H. Blake, Newark, N. J.; William J. Hagenah, Glencoe, Ill.; Stuart M. Crocker, New York, N. Y.; George H. Clifford, New York, N. Y.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

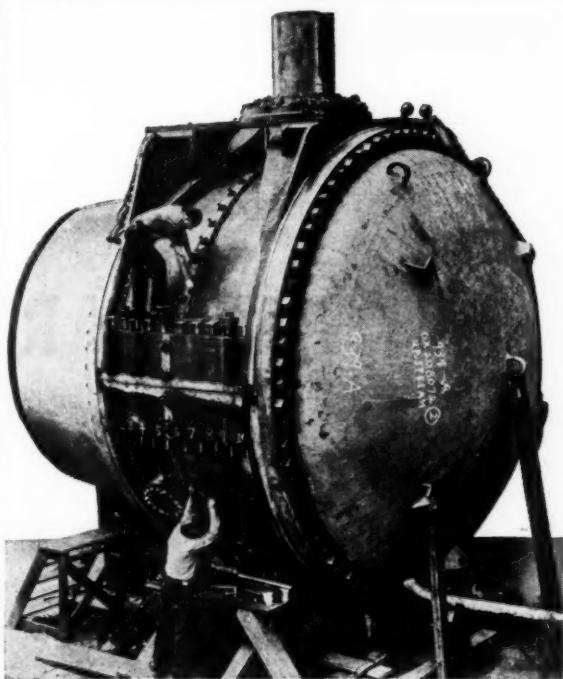
4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

PUBLIC UTILITIES REPORTS, INC.
A. S. Hills, Business Manager

Sworn to and subscribed before me this 12th day of October, 1953.

Josephine A. Olker
Notary Public

(My commission expires August 31, 1955)



This 16-Foot Butterfly Valve Illustrates the type of work which Newport News takes in stride. Newport News built 3 such valves, each weighing 446,000 lbs., for the Ross Power Plant, Skagit Project, Department of Light, City of Seattle, Washington. Designed for a water flow of 3,620 cu. ft. per sec., and a hydrostatic pressure of 290 psi, these valves were shop tested by Newport News at 450 psi. They are hydraulically operated with oil at 1,500 psi. pressure. Shop tests assure speedy, trouble-free assembly of Newport News built equipment, on the site.

The TEST of a TITAN

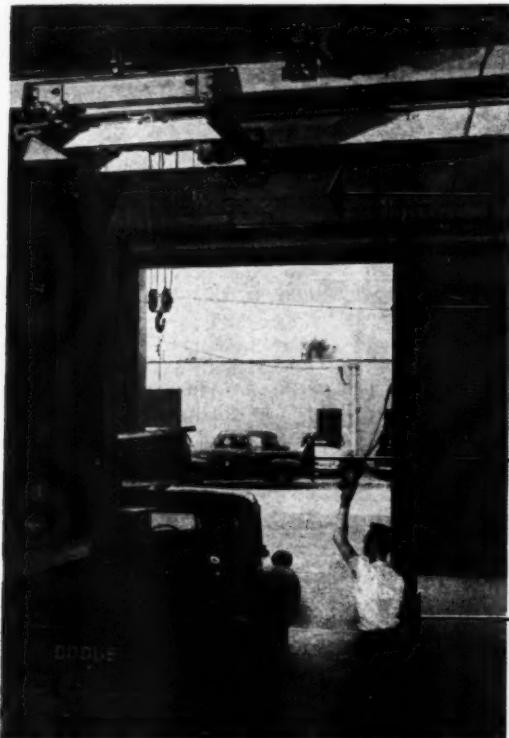
Here is one of the largest high head butterfly valves ever built, undergoing a shop test at Newport News. If you had an opportunity to follow this unit from start to finish, you would see *first hand* how Newport News produces massive equipment *economically*. For economy is a basic advantage that results from Newport News' high integration of skill and production facilities.

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Kinnear Steel Rolling Doors are built to fit openings of any size, in any building, old or new. Write today for full information.



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Saving Ways in Doorways

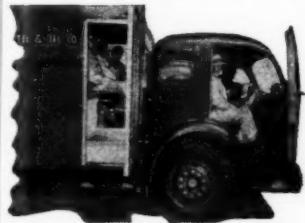
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Three-man crew compartment with overall length shorter than conventional line trucks. 60 inch CA dimension, shorter wheelbase make it possible.

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Aerial view of the new
Walter C. Beckjord Station.



Installation showing two
60-cell Exide-Manchex
control batteries.

CINCINNATI GAS & ELECTRIC COMPANY—another user of dependable

Exide-Manchex BATTERIES

Still another forward step in electrical progress! The new Walter C. Beckjord Station, located on the Ohio River, 18 miles upstream from Cincinnati, was designed for an ultimate capacity of 1,000,000 KW. Exide-Manchex batteries furnish the 129-volt control voltage necessary for operating the 2300 and 440 volt auxiliary circuit breakers and auxiliary equipment used in the plant, as well as the 132 kv circuit breakers in the switchyard. The Exide-Manchex control batteries also furnish power potential for alarms, relays, emergency lighting, and miscellaneous requirements.

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Exide-Manchex is your best battery buy for all control and substation services

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"EXIDE" and "MANCHEX" Reg. T.M. U.S. Pat. Off.

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Exide-Manchex batteries offer better service . . . longer life for these reasons:

POSITIVE OPERATION: Dependable performance at ample voltage with no switchgear failures.

INSTANTANEOUS POWER: High rates for switchgear operation with adequate reserve power for all other control circuits and for emergency lighting.

LOW OPERATING COST: Extremely low internal resistance.

LOW MAINTENANCE COSTS: Water required about twice a year. No change of chemical solution during life of battery.

LOW DEPRECIATION: Sturdy, long-life construction.

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Removal of Large Micron Dust Particles IS NOT ENOUGH!

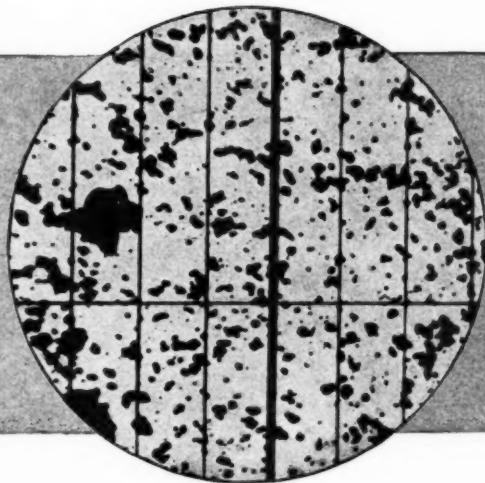
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**take out the SMALLEST PARTICLE
of pipe line dust**

Repeated tests have proved it's the *small* dust particles which cause the most trouble and damage in gas systems. Pilot stoppages, for example, are caused by dust particles ranging in size from 10 microns to less than one micron.

OIL BATH SCRUBBING

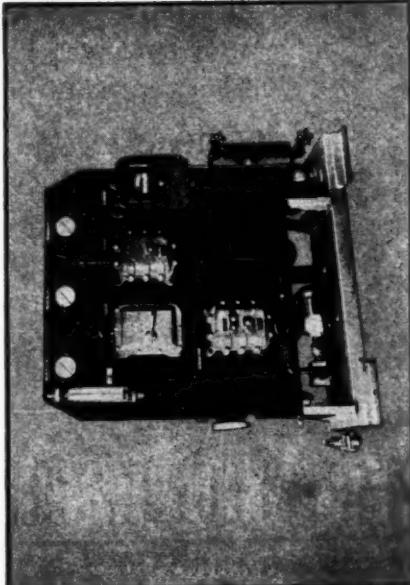
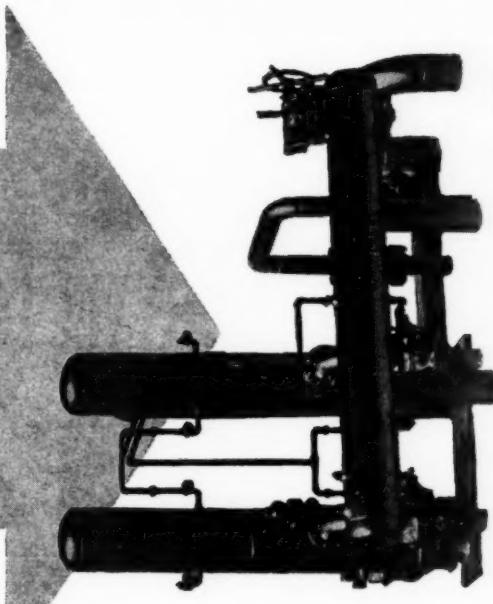
is the only gas cleaning method definitely known to remove even the smallest dust particles from gas. Blaw-Knox Oil Bath Process Gas Cleaners give you much more than a high percentage of dust removal—they clean out the smallest particle of dust from your gas stream and effec-



Photomicrograph (200X) of dust removed by Blaw-Knox Gas Cleaner. Each line is one micron (.000039 in.). Note that many particles are of sub-micron size.

are of sub-micron size.

tively stop plugging of pilot orifices and damage to regulators, compressor parts and metering devices. They cut maintenance and service costs and improve customer relations by providing *clean* gas at all times. For complete information, write for Bulletin 2353.

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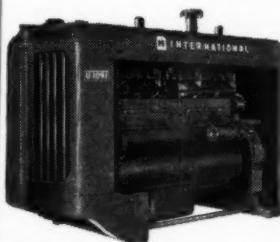
Delta-Star clamp type connectors incorporate the three essential requirements of positive electrical and mechanical connection, ease of installation, and continuity of service over long periods of time.

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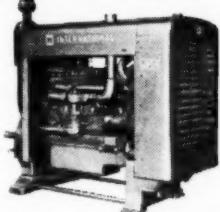


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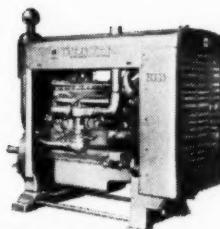


NEW U-1091 natural gas power unit develops 187 net h.p. at 1400 rated r.p.m.; 200 net h.p. at 1600 max. r.p.m.; maximum torque, 820 lbs. ft. @ 800 r.p.m.

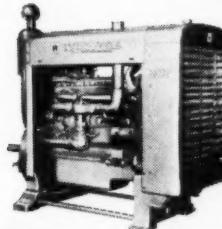
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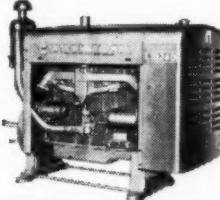
NEW U-406—91 net horsepower at 1800 rated r.p.m.; 98 @ 2200 r.p.m.; maximum torque, 279 lbs. ft. @ 1200 r.p.m.



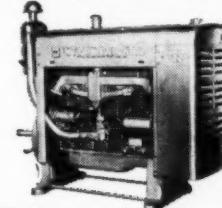
NEW U-372—83 net horsepower at 1800 rated r.p.m.; 91.5 @ 2200 r.p.m.; maximum torque, 263 lbs. ft. @ 1200 r.p.m.



NEW U-269—62 net horsepower at 1800 rated r.p.m.; 72 @ 2400 r.p.m.; maximum torque, 191 lbs. ft. @ 1200 r.p.m.



NEW U-240—55 net horsepower at 1800 rated r.p.m.; 64 @ 2400 r.p.m.; maximum torque, 168 lbs. ft. @ 1200 r.p.m.



NEW U-220—50.5 net horsepower at 1800 rated r.p.m.; 62 @ 2400 r.p.m.; maximum torque, 151 lbs. ft. @ 1200 r.p.m.

IH Announces Seven New International Engines

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These new models are the result of more than 45 years of IH engineering and manufacturing experience building a complete line of heavy duty engines for tractors, trucks, construction and oil field equipment and individual power unit applications.

These new units have the durability, flexibility and economy to meet your requirements for lower cost per-

formance. The unmatched network of IH district offices, parts depots, distributors and dealers puts complete service facilities practically at your door.

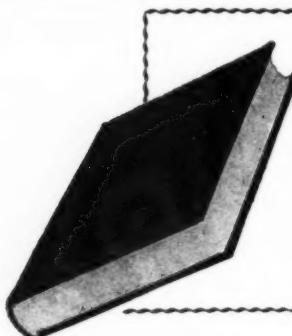
If you are an individual user of engines, it will pay you to see your nearest International Industrial Distributor or Power Unit Dealer for more complete information. If you are a manufacturer, your nearest IH district office will be glad to help you engineer these engines into the equipment you are building.

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*Here is . . .
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 and its integration in
 the efficient plant*

Here is an unusually comprehensive discussion of steam power plant machinery from the standpoint of construction of the various types of equipment, their performance characteristics, economics, and integration in the complete plant. The book provides engineering data on the design of this equipment, a knowledge of the economics of the efficient plant, and considerable information that will be of value in problems of the selection of equipment suitable for various purposes.

The author says in the Preface: "The treatment begins with fundamentals and develops in a way that allows the practical man as well as the student to expand his knowledge progressively through the more difficult subjects to the goal—complete integration of all machinery."

Retaining the same general plan and organization which contributed so to the success of the previous editions, the present edition of this practical book follows an especially comprehensive approach in dealing with power plant machinery. After outlining the equipment of a power plant, the book shows how each piece of apparatus or equipment is constructed, then presents its performance characteristics, and finally discusses economic and other factors of its integration with other major and minor machinery. A glance at the chapter headings will indicate how thoroughly the book covers the various elements of the steam power generating plant.

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